# HEAT SIPHON® Swimming Pool Heat Pumps Add-On/Accessory Kits



### "WE PERFORM TO KEEP YOU WARM!!"

#### **DIGITAL ADD-ON KIT** For Your D/DX Series Digital HEAT SIPHON<sup>®</sup>

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# **Your Kit Should Include:**

Your T-Type POD Kit should contain the following Items:

- ONE (1) T-TYPE POD Assembly with 25 feet of two conductor cable attached
- ONE (1) EASYCLOCK add-on Circuit Board
- Instruction Manual with warranty card NOTE: There are two T-POD versions depending on your pump voltage -110volt and 220 volt. MAKE SURE YOU HAVE THE RIGHT VOLTAGE T-POD FOR YOUR PUMP.

Using software and hardware ALREADY BUILT INTO your D or DX series DIGITAL HEAT SIPHON's PLAYER CONTROL BOARD, your T-POD Accessory Kit minimizes your pump operating cost by providing a one-event-per-day pump timer with off cycle heating (PumpJump<sup>TM</sup>) to maintain your pool at temperature 24 hours/day - 7 days/week.

# **QUICK-START Operating Instructions**

T-POD is designed to let you control your pool or spa pump's daily start-up and run times in 6 minute increments from ALWAYS OFF to 24 hrs ON. It does this using just the TWO(2) buttons on your Digital Heat Siphon Player.

Once it is successfully installed your Digital Heat Siphon Player will automatically turn your pump on and off in the background. Each time a key is pressed your Player control will add the pump settings at the end of the normal message scrolling in five consecutive screens:

- 1. "Pool"
- 2. "82F"
- 3. "Heat"
- 4. "Set"
- 5. "79F"

You set the "On In" - "X.X HRS" and the "For" X.X" hours using the Player "UP" and "DOWN" Keys on your Heat Siphon. (X.X represents the hour numbers you set such as 10.2 or 4.5 etc.)

In addition, the T-POD enables the "PumpJump<sup>TM</sup>" feature built into your Heat Siphon Player Controller to ensure that your pool temperature will be maintained even when you scheduled your pump to be off. It does this by turning your pool pump on every 30 minutes and briefly running it long enough to clear the plumbing lines and check the temperature. If the water is still warm, the pump is shut off. If the pool water is more than 1.5° F below set-point, the pool pump will continue to run and your Heat Siphon will turn on and run until the pool reaches temperature. Then both Heat Siphon and pump will shut off. To enable PumpJump<sup>TM</sup> just PRESS

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BOTH KEYS once and the blue LED will light indicating it is in PumpJump<sup>™</sup>. Repeat keypress to disable it.

#### **INSTALLATION**

Installing your T-POD Timer kit is EASY however we recommend that you contract a licensed Electrician for the electric power wiring. Here are the five basic steps:

A Mount your T-POD on a wall next to your pool pump power wires and within 8-10 feet of Heat Siphon Player Control so the supplied cable will reach it.

Cut into the pool pump power supply wiring and connect your T-POD between the breaker and your pump. Your T-POD has 4 screw-down terminals and two 1/2" conduit nipples to make wiring easy.

CRun the attached 24 volt control wire to Your Heat Siphon and screw down the pre-stripped leads into the POD terminals on your Player Board.

DInstall your Easy-Clock plug-in board into the D-sub connector on the back of your Heat Siphon's Player Board.

Program your Pump on time and run time using your Player's Up and Dow keys.

#### **PART A - Mounting your T-POD**

#### Tools Required:

Cordless Drill Phillips Head Screw Driver

Chose a wall mounting location between your breaker box and pool pump and within 8-10 feet of your Heat Siphon if possible (the 24 volt control wire can be extended as necessary). You will need free wall space approximately 12 inches wide by 24 inches high to mount the T-POD and it should be directly over or in line with the power wires going from your pool pump to your AC power supply. T-POD comes with two 1/2" conduit nipples installed to permit the use of conduit between the breaker and the pump.

2 Remove the T-POD cover from the base by removing the four stainless steel machine screws and lifting the cover off of the base.

**3** Fasten the base to the wall using the TWO (2) mounting holes in the center sides of the base. Use appropriate fasteners for the wall material - deck screws if wood or concrete anchor screws etc.

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### **PART B - Power/ Pump Wiring**

NOTE: It is strongly recommended that a Licensed Electrician perform all Power Wiring

**TURN OFF ALL POWER to your Pool Pump (circuit breaker) and prepare the** wiring to be cut and spliced or run new wire from your pump breaker/disconnect switch to the T-POD and from the T-POD to the pump as shown.

2 Connect the two wires from the breaker to the two screw down terminals ON THE RIGHT SIDE of the T-POD marked "FROM POWER LINE BREAK-ER". This ensures that the T-POD's 24 volt transformer will be powered all the time so the "ON OFF AUTO" toggle switch will work properly and to enable the POD terminals on the Player to complete the control circuit.

Connect the two POWER wires from your pool pump to the two screw down terminals ON THE LEFT SIDE of the T-POD marked "FROM PUMP".

CAUTION: If the wrong terminals are used your T-POD will not turn on or function properly

#### SEE THE APPENDIX A or B for DETAILED POOL PUMP WIRING DIAGRAMS your T-POD Voltage

# **PART C - Heat Siphon Control Wiring**

Tools Required: Small Flat Blade Screw Driver Phillips Head Screw Driver

**TURN OFF ALL POWER to your Heat Siphon (circuit breaker)** and remove the 6 digital door screws. Tilt the door forward until you can access the back of the Player board.

ACCESS HOLE FOR CONTROL WIRE



2 Remove the Heat Siphon fan grille by removing the three stainless steel 3/8" acorn nuts and lifting the grille off the studs. This allows access to the back inside of the Player pocket from above.



Remove Screws and tilt door forward



**Run** the brown sheathed control wire from the T-POD to

Your Heat Siphon and thread it through the access hole (after removing the plastic cap) and through the rubber grommet into the 3/4 inch diameter hole in the Player pocket from behind the backpanel.





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Replace the cork tape on the wires and loom coming out of the backside hole or if no tape exists use duct tape to reseal the wires from the inside. This is necessary so that rain water flung from the fan blades horizontally against the backpanel will be prevented from getting into the Player pocket.

**5** Loosen the set screw on the two POD terminals on the Player board. On later revision Players with three POD terminals-use the 2 on right(see figure) Insert the red and white wires into the POD terminals and screw down the set screws Pull on the wires to make sure

they are securely fastened to the Player board.

Leave the door open to perform the next steps

### **PART D - Installing Your Easy-Clock**

Tools Required: Small Flat Blade Screw Driver Phillips Head Screw Driver

With the door hanging down locate and remove the green protective cover on the 9 pin connector Player board.

Push the Easy-Clock board onto the mating 9-pin connector making sure it is all the way on. Using a small flat blade screw driver tighten the two small screws on the connector to securely hold it to the Player board.

**3** Replace the door screws and turn power on to your pump and check for proper operation of the T-POD without the Heat Siphon running. When you place the toggle switch in each of the three positions, it should read as follows:

- "ON" position turns pump on
- "OFF" position turns pump off
- "AUTO" does nothing

Turn Power on to Heat Siphon. The Player should reboot and LEDs should display the status menu including the following (... represents 1 second delay):

- Pool . . 85F . . . .
- HEAt . .SEt . . 86 F . . . .
- tPod . . . .
- run . . For . .
- 12.5H . . . .
- On In . . -12.0 . . . .

(pool is at 85F) (Heat Siphon is on)

(pump will run for 12.5 hours) (minus = turned on 12 hours ago)

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### Troubleshooting

You don't see "tPod" on the LED display after pressing either the "UP" or "DOWN" key.

- Make sure the Easy-Clock Card is firmly seated in the connector
- Reboot the software by (1) pressing both keys then while flashing, then (2) pressing either key until "OFF" is displayed and stops flashing, then (3) pressing either key

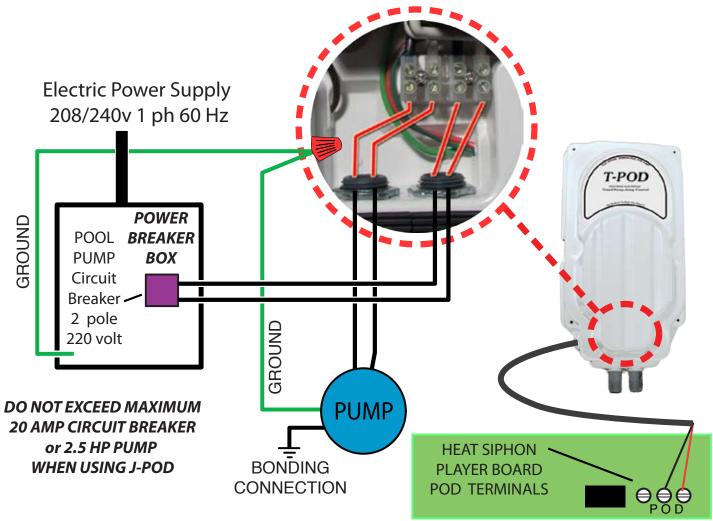
#### You can't access the T-POD pump schedule routine

- press either key and wait for the messages to cycle as noted above in PART D step 4
- press either key when the "run" "For" is being displayed and it will flash.
- press up or down while it is flashing to change the length of pump on time.
- do the same for "On In" when displayed to change the time to the next pump on event.



# 220 Volt T-Type POD Installation Wiring Diagram

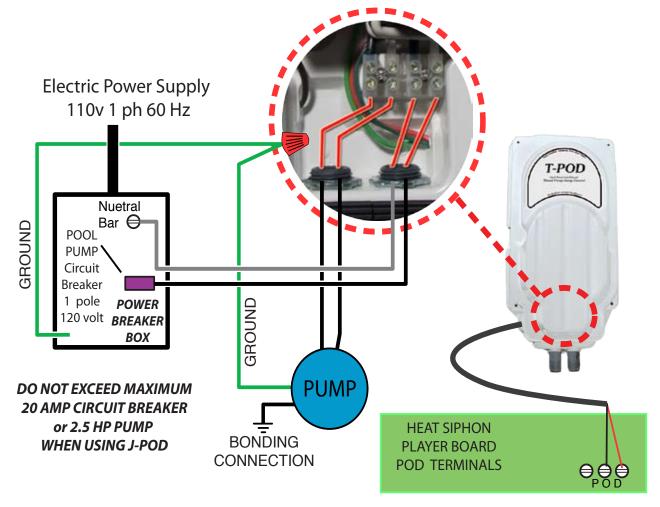
# **INSTALLATION DRAWING 220v T-POD**



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# 120 Volt T-POD Installation Wiring Diagram

# **INSTALLATION DRAWING 110v T-POD**



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#### **NOTES**

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