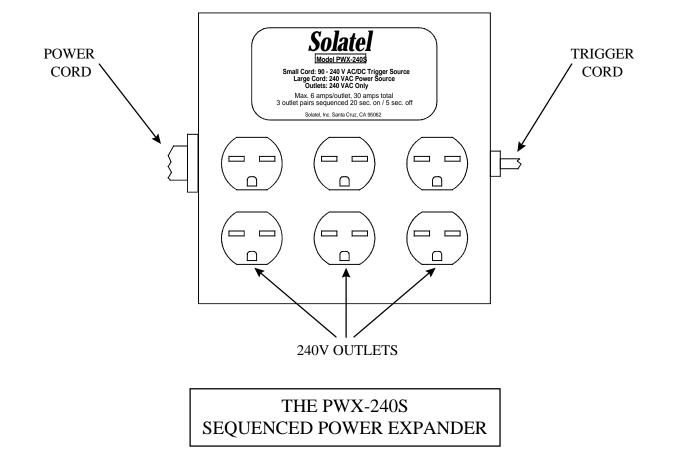
SOLATEL PWX-240S SEQUENCED POWER EXPANDER



The Solatel PWX-240S Sequenced Power Expander lets you control 240V devices from a 120V (or 240V with correct plug) controller or timer. The PWX-240S sequences the outlets in 3 pairs with delays between each pair. A typical plug-in controller, such as Solatel's Plant Pro, is limited by the 120V 15 Amp outlet that it plugs in to. Adding a PWX-240S provides outlets for up to six 240V lamps or any other combination of devices that draw no more than 30 Amps total. If the circuit supplying power to the PWX-240S cannot provide 30 Amps or the building circuit breaker cannot handle the inrush current at turn-on, then this will reduce the number of devices that can be controlled. It can also be used with pumps, fans, or other devices. Multiple PWX-240S's can be used to control a large number of devices.

The PWX-240S has two cords and six outlets. The outlets are the type used for 240V equipment. This eliminates the risk of plugging a 120V device into a 240V outlet. The Power Cord is connected to a 240V service and provides current to all of the PWX-240S outlets. The Trigger Cord plugs into a controller or timer and provides the control signal which switches the outlets on or off. The Trigger Cord draws very little current and can therefore be plugged in to a controller along with other devices being switched. The outlets are sequenced on and off. Twenty seconds after the Trigger Cord is switched on, the first two outlets turn on, 20 seconds later the next two, and 20 seconds after that the final two, going from left to right. This allows time for the start-up current surge ("inrush") of two lamps to finish before the next two create their inrush current. This reduces circuit breaker tripping and other electrical problems. Turn off is sequenced with 5 second delays. The Trigger Cord can be lengthened by using any standard 120V extension cord.

PWX-240S INSTALLATION OUTLET B1 TRIGGER <u>Solatel</u> POWER CORD. CORD II Cord: 90 - 240 V ACIDC Trigger S arge Cord: 240 VAC Power Source Outlets: 240 VAC Only 120V or 240V 240V _ CONTROLLER Ω Ω **SERVICE OUTLET** _ _ OUTLET A1 **OUTLET C1** Ω OUTLET A2 **OUTLET C2** nln TIIC OUTLET B2 K 240V DEVICES SWITCHED BY PWX-240S

6 AMPS MAXIMUM PER OUTLET, 30 AMPS TOTAL

Caution: Unless you know how to do 240V electrical wiring, please get help from someone who does!

- Plug the trigger cord into the controller or timer's outlet. Trigger will work from 90V to 240V AC/DC, at 0.001A nominal. For 240VAC, replace trigger plug with correct plug, NEMA 6-15P.
- Plug 240V devices to be switched into the PWX-240S. Each outlet can provide 6A maximum. The total current of all outlets is 30A maximum, less if the circuit breaker rating for the 240V service is smaller. Use devices with the correct plug, NEMA 6-15P.
- Use the outlets such that devices are as evenly distributed as possible among the A, B and C outlet pairs. When sequencing on or off, first are A1 and A2, then B1 and B2, and finally C1 and C2. For example, with 3 devices, plug one into outlet A1 or A2, one into B1 or B2, and one into C1 or C2.
- If you have a suitable 240V outlet or can add one, add the appropriate plug to the Power Cord. Typical 240V outlets available in a residence are: Air conditioner: 15A or 20A, electric clothes dryer: 30A, electric stove: 50A.
- If you want to hardwire the Power Cord, use a strain relief suitable for a cord, not just one for conduit. Make sure that the service has an appropriate 2 pole breaker.
- The Power Cord colors are BLACK first 240V line, WHITE second 240V line, GREEN ground. Neutral is not required. Although two phases of a 208V three phase Y or delta system can be used, fewer devices can be controlled due to the increased current of each device when wired for the lower voltage. Make sure that the devices are wired for 240V or 208V as required.
- To add more PWX-240S's, plug the trigger cord of the second PWX-240S into outlet C1 or C2 of the first PWX-240S. For each additional PWX-240S, continue chain and plug trigger into previous unit's C1 or C2. Change trigger cord plug to NEMA 6-15P when plugging into another PWX-240S.