

## **Initial Calibration Instructions – SR 500**

**The purpose of these instructions is to provide information on how to get the SR-500 operating on your pool or spa after the electrical wiring is completed. These instructions are to be used WITH your instructional manual. Please read your instructional manual PRIOR to installing and calibrating the SR-500.**

Calibration Instructions:

1. Push and hold “set” button – Screen will change from “set up mode” to “service mode” - release set button – screen will read “firmware version”
2. Push “set” button – screen will read “initialize unit – format EE” This step formats the eeprom and microprocessor – push “yes” – screen reads “init successful – set to continue
3. Push “set” button – screen will read “set sensor zero” – The sensor **MUST** be open to atmosphere (no hose attached) to properly zero. Push the “yes” button to zero the sensor – screen will read “zero successful”
4. Push “set” button – screen will read “prime pump?” Pushing yes at this point will start the pump for a 60 second block of run time, during which it will read the vacuum level created by the pump. (screen will read “full prime? y/n”) Therefore, it is imperative that the pump be primed and ready to run, all baskets and the filter be clean, and the system be set up for normal operation at this time. To properly calibrate the unit, get the pump running at a full head, then push “yes” before the 60 second run block ends. If it takes longer than 60 seconds to reach full prime, push “yes” again to start another block. This step sets the unit’s operational vacuum parameters which it will refer to every time it starts the pump, so it is important that the pump be fully primed and running at it’s full potential and the system be set up as it will normally run before “yes” is pressed, otherwise your calibration will be inaccurate and operational difficulties will result. Screen will read “please wait” while it saves the vacuum data, and will display the stopped vacuum level.
5. Screen will read “reference vacuum – Delta P – xx.x” this value is the vacuum difference between the pump running and stopped.
6. Push “set” button – screen will read “reference vacuum stopped – xx.x” this is the vacuum level when the pump is not running.
7. Push “set” button – screen will read “reference vacuum running – xx.x” this is the vacuum level while system is in operation. Save this value for future reference.
8. Push “set” button – screen will read “vacuum cutoff at 3” above reference” This is the upper threshold, or how much of a vacuum “spike” will cause an alarm state. It can be made as sensitive as 1” or as broad as 5”. Usually the 3” default setting is sufficient for most systems, however, in cases of extreme debris collection due to location of pool or season of the year, the upper threshold can be raised to 5” to accommodate the changes in vacuum caused by baskets filling with debris.

9. Push “set” button – screen will read “heater control (y/n) no”. This activates the heater delay circuit, which will shut down the heater 15 minutes before the pump shuts down when operating in Timed mode. If you are using the heater delay circuit in the unit you will need to activate it here by setting to “yes”. If you are not using the heater delay, leave at “no”.
10. Push “set” button – screen will read “default running mode: none” This is the mode the unit will return to in the event of a power outage. Set this parameter for the run mode you will normally operate in (usually “timed” for residential applications, “cont.” for commercial applications, and “remote” for systems using an automated controller or spa jet pumps controlled by an air switch or spring-wound timer.)
11. Push “set” – screen will read “firmware version”
12. Push “off” to exit service mode