KATADYN GROUP
SWITZERLAND

Memorandum

Ref:	**June 2019 Technical Bulletin -**		
From:	Spectra Watermakers		
To:		**Date:**	06/20/2019

Boost Pressure Set Up

One of the biggest differences between the MPC and the Connect operating systems is the Boost Pressure Setpoint used at the beginning of the Autorun cycle. In the Settings section of the user manual, under Dealer Access, the Boost Pressure Setpoint is defined as:

Boost Pressure Setpoint: *During startup, the controller turns on the boost pump and waits for the Boost Pressure to reach the Boost Pressure Setpoint. If the boost pressure fails to reach this setpoint, then the main pump won't turn on.*

What does this look like on the system? It looks like this:

Note: -3 psi is displayed when there is no reading from a pressure sensor.

This is how the Spectra Connect system primes itself for operation. Unlike the MPC systems, the freshwater flush solenoid does not open at the beginning of the run cycle and the system must be primed by seawater from the boost pump.

A number of circumstances can prevent the system from running when the Boost Pressure Set Point has not been reached. When this occurs, you will see the above screen for a few minutes. Once the system gives up, the system will perform a freshwater flush. Here are details to check when getting this alarm:

- Intake thru hull or seacock is closed
- Prefilters/sea strainer/thru hull are so clogged that flow is not allowed through the system
- Air trapped in prefilter housings
- General operation of the boost pump
- Pressure sensor is plugged in. Check at yellow connector as well as Phoenix connector on circuit board

If you do not resolve the issue after checking the above you should review the Boost Pressure Setup window and restore the settings back to default if they have been changed.

To access the Boost Pressure setpoint, the user must navigate to the Boost Pressure Setup Screen in the Dealer Access menu of the Spectra Connect Settings. The Dealer Access password and username is ‘admin’.

The factory default for the Boost Pressure Set Point is 15 psi. This value was chosen because it is just above atmospheric pressure of 14.7 psi. Once the inlet of the pump reaches atmospheric pressure the feed pump is no longer running in a vacuum. Once the Boost Pressure Set Point is reached the feed pump turns on and the run cycle begins its next phase.

The factory default for Low Vacuum Limit is 10 psi. This is the minimum boost pressure required at the inlet to the pump. This setting prevents the pump from getting damaged by running under a high vacuum. Adjusting it to a lower number increases the risk that the pump will suffer damage during normal operation.

If you would like to bypass the setpoint altogether and run the system for further diagnostic purposes, uncheck the box shown above.