

Alex-Tronix Service Bulletin No. 19, Rev 0, as of 05-11-11

Controller: ENERCON PLUS ONLY.

Issue: System Not Operating Valves.

Controller appears to be operating, but valves do not operate. Unit is programmed properly.

Greetings Alex-Tronix Fans:

The Enercon plus is an improved version over the Enercon 4-24. Many improvements have been made including software updates, using output board with station modules, more efficient battery power usage allowing longer life, and software performance improvements.

Q1) Is this a new installation?--Has it ever worked before? if yes, move on to Q2; if no then:

a) **Are you using the BCS-SOL's?** This is an electronic module connected to our latching solenoid (LS) at the valve. **YOU SHOULD NOT BE....** Those are only used for the BCS system. For all Enercon controllers, only ***latching*** type solenoids are used.

b) **Have you checked for shorts or opens on the outputs?** Preferably using a digital multimeter... Do the following:

- 1) Remove bottom door on pedestal to expose the output drive board.
- 2) Set your multimeter to "ohms" (omega symbol, or upside down horseshoe)
- 3) With the field wires still connected to the terminal strip, put one probe on the common and the other on each station.
- 4) Read the multimeter in ohms ... You should read a resistance from 8 to 25 ohms depending on the solenoid manufacturer. If you are using the Alex-Tronix LS solenoid provided by us, the resistance will be approximately 9 ohms per solenoid, not counting wire resistance.

If any or all stations read "open" (infinite resistance), then you either have the wrong common wire selected or the field wiring is broken somewhere. You'll need to trouble shoot your field wiring further in depth. Start by disconnecting all commons, and verify the controller is okay by running the self test feature called the **OBT** (OUTPUT BOARD TEST). This test will check the output board for integrity. Review the Enercon's user manual to run this procedure first to rule out the controller.

c) **Is any or all latching solenoids wired in reverse?** All black wires must go to "C" on controller terminal. Remaining red wires connect to each individual "Station" terminals.

d) **Does your valve require an adapter between the solenoid and valve?** Check the Alex-Tronix compatibility chart and see if you need an adapter or a special O-ring to make our LS solenoid operate your valve. If the manufacturer of the valve you are using makes their own latching solenoid, I strongly suggest you use thier solenoid with their



Alex-Tronix Service Bulletin No. 19, Rev 0, as of 05-11-11

own valve for better compatibility. Do not mistake a valve adapter for a BCS-SOL module.

e) **Is the rain switch feature or the rain switch itself activated?** If you are not using a rain switch, the rain switch setting within the **HELP/INFO** sub menu should be set to "OFF". If you are using the rain switch, then the rain switch itself should be checked for correct installation, operation, and wiring (normally open).

Q2) System has been operating fine, but now not working.

a) **Are the 9V batteries run down?** Attempt to operate any valve in the manual mode, then observe display with the knob now set on the RUN/STATUS position. Does it say change batteries? If so... You know what to do!

b) **All valves not working? or some?** If any wires are suspected broken, run test Q1-B.

The second thing to try is to swap (green only) modules with each other on known good stations. Each module contains four stations. If it begins to function, replace the bad module with a new one. Also, make sure they are plugged in properly; they should snap onto the velcro fastener when seated correctly.

You can also swap station wires with each other to see if the valve in question begins to operate. If so, send in the main panel and output board in for service. Do not remove the pedestal.

c) **Main water line okay?** Check this by manually operating valve (at valve not controller). Loosening solenoid, or opening a bleeder will achieve this. If main water is pressured up okay and valve does not open-- Suspect valve.

d) **Test Solenoid--** First run the OBT test, found in the operation manual to make sure the controller is okay. Now verify the solenoid working properly by removing the solenoid from the valve and re-wire it directly at the controller's terminals. Latch and release it using the MANUAL function. Make sure plunger does not fly out of solenoid coil when testing; place your thumb over it, and observe action.

Questions??? Tech Support: Aram Tokatian 888-224-7630 EXT. 16

