

# Energy and Water Solutions

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## Software Instructions for the EWS Controller

**These instructions are not the complete instructions that come with your kit. Some of our information is confidential and is only provided with your kit.**

### Installing the program and connecting to your computer

1. Boot up your computer and have no software showing on your screen
2. Extract the Test Tool program and install the program on your computer.
3. Run the program.
4. The rest is confidential information. This rest of the information is only provided with your kit.

### Using the Software

You do not need to turn the engine on to connect to the software, but to see what the engine and CNG system is doing the engine must be running. This program does not properly save and load files but it will instantly save any changes you make after hitting the enter key after typing in any changes.

To display what is happening click on the Oscilloscope tab. The Optimum Position is the stepper motor starting position and will slowly change as needed so the engine starts with the stepper motor in the optimum position. The Actuator position is the current position of the stepper motor. Below these voltages is a horizontal graph which shows the stepper motor position and the range in blue. The idle should be adjusted so that the stepper motor position stays near the center of the blue range. If running at higher RPMs the stepper motor should always stay in the blue range and not limited to either end of the range. The range can be increased if needed using the Actuator tab. The O2 sensor and TPS voltages are displayed. The squares under the TPS voltage display how much the throttle is pushed. Below the O2 sensor voltage are 3 circles. These display the Green, Yellow and Red lights the same as the lights on the FBS. The graph will show the four parameters in four different colors over time so you can better see how the system is operating. See the Owner's Manual Operation and Trouble Guide for operating and troubleshooting information. This program does not display the RPM.

The Oxygen Sensor tab is where you can select the type of sensor and the heat time delay before the system will change from the optimum setting. We have not been able to get any O2 sensor to work except the 0-1 volt.

The TPS tab is used to select the type of TPS voltage. You must select the type used on your engine. The 0 to 5 volt increasing is used on most engines.

The Actuator tab is where you can change the stepper motor settings. The optimum position must always be set to self regulating. To change the optimum position, click in the box and backspace the number out and type in the desire number. Hit the enter key after typing in the number. 0 is fully closed and 240 is full open. To save the new setting the battery power to the FBS must be removed and turned back on after a few seconds. Do this by removing the fuse or unplugging the FBS for a few seconds. The percentage buttons allow you to

change the range of the stepper motor at idle and while running. It may not allow you change to any button pushed.

You will not need to do anything with the General, Booster or Emulation tabs. Your system does not emulate which is sending a false signal to the engine's ECU.

**DO NOT CALL US WITH SOFTWARE OR COMPUTER QUESTIONS.**