



4 Station Fuel Control Manifold

This manifold features 4 separate stations for electronic valves, either normally open (NO), normally closed (NC) or a mix of the two. While all the valves have a common supply and exhaust (the IN and OUT passages), they are tunable separately by the use of standard 7/16"-20 screw-in bypass pills. The bypass pills screw into the front ports and determine HOW MUCH fuel is added or subtracted from the overall tune when the valve behind it is activated or deactivated. Be sure to screw the bypass pills into the valve body until they STOP against the end of the passage for them. Use only ONE bypass pill per port.

If a station is disabled (no valve), use a standard -10 ORB plug to block the valve hole in the main body. You also **MUST USE A BLANK BYPASS PILL (NO HOLE)** for that station! Forgetting to block the pill port for a disabled station constitutes a huge internal leak and will cause a severe pressure drop and lean condition in the fuel system.

An IN and OUT in each end of the body allows versatile plumbing. This could allow joining another return line to the unused OUT to have fewer lines back to the tank. The other IN port could be used as a source of pressure for a sensor or other purpose as well.

The valves used in this product are 12VDC, low current (1.7 amps) and can be used for continuous duty. They will continue to open and close at pressures up to 3500 PSI. Both wire leads for each valve coil are RED and polarity insensitive. Either can be positive or negative and this will not affect operation.

Be sure to note that most controllers, RPM activated switches, etc. will NOT switch 12V directly, but instead complete the circuit to GROUND to switch each of the valves on.

The manifold body and valve stems will resist rust and corrosion, but should be removed from the body, blown dry and oiled when left to sit for long periods.

Example setup:

Station 1. (NC valve) "Stage Valve" lean-out to control engine temp while staged, ~700 degrees EGT desired. Connected to trans-brake switch or clutch switch.

Station 2. (NC valve) "Low speed" lean-out. Allows richer mixture (smaller main pill) off the line for best torque. Once the car gets moving (1.8 - 2.3 sec. out), opens and leans system for best middle track performance.

Station 3. (NO valve) Slight Enrichment for best torque when shifting to high gear.

Station 4. (NC valve) "High-speed" lean out for best top end horsepower.