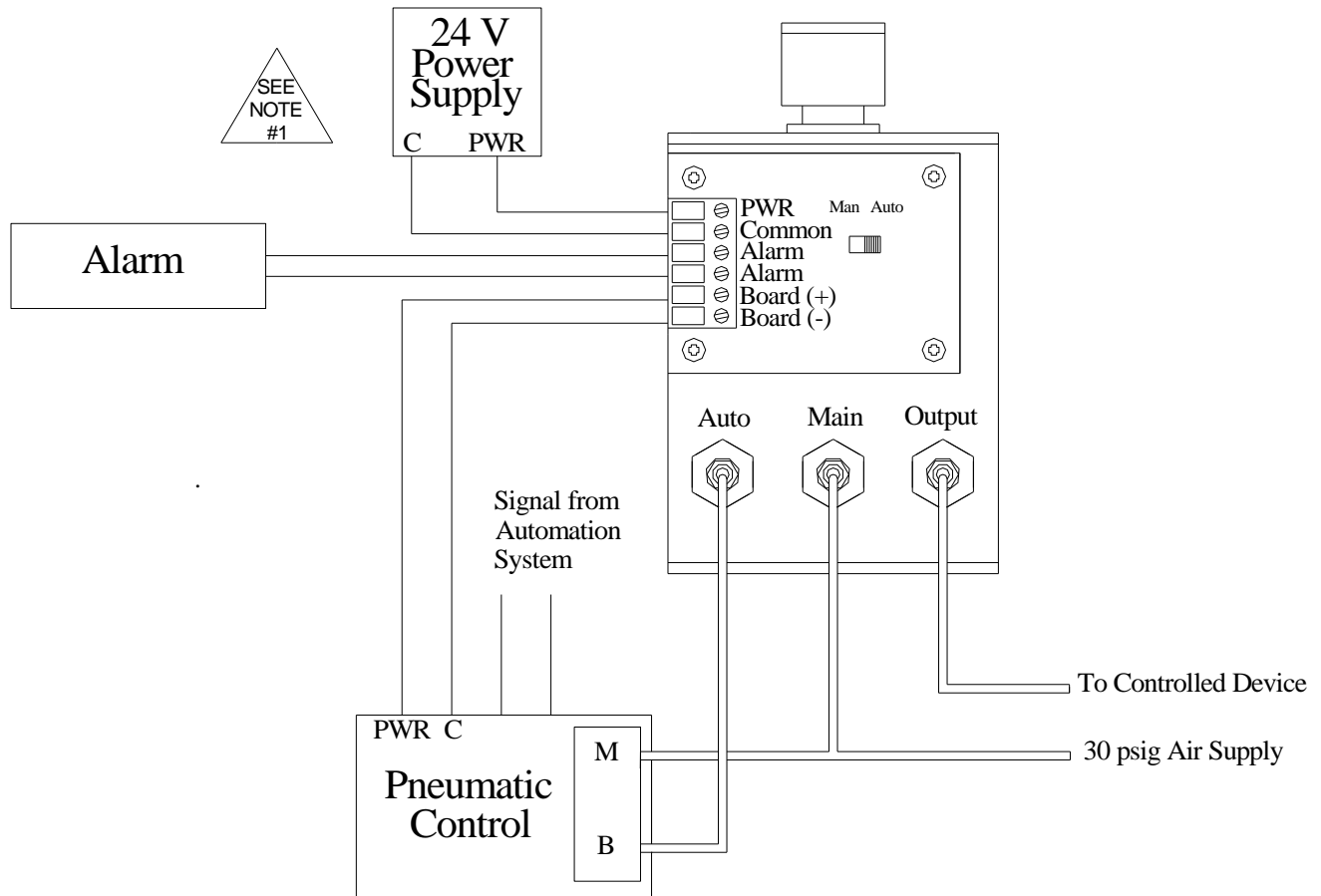




## Installation and Operation Instructions MPOE

### Manual Pneumatic Override/Electric



## INSTALLATION

**READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION.**

### MOUNTING:

MPOE is designed to mount in a remote field panel using 3/16" dia. mounting holes in base.

### POWER CONNECTIONS:

Be sure to follow all local and electrical codes.

Refer to wiring diagram for connection information.



1. **24 VDC** – with power off, connect 24 volt DC power supply to terminals PWR (+) and C (-) on the board.

**24 VAC** – with power off, connect one transformer secondary leg to the PWR (+) on the MPOE. Connect the other transformer secondary leg to C (-). Check the wiring configuration of any other loads that may be connected to this transformer.

If required by BAS or controller specification, the 24 VAC neutral can be earth grounded at the transformer. Analog input, digital input, and analog output circuits should not be earth grounded at two points. Any field device connected to this transformer must use the same common. If you are not sure of other field device configuration, use separate transformers for isolation.

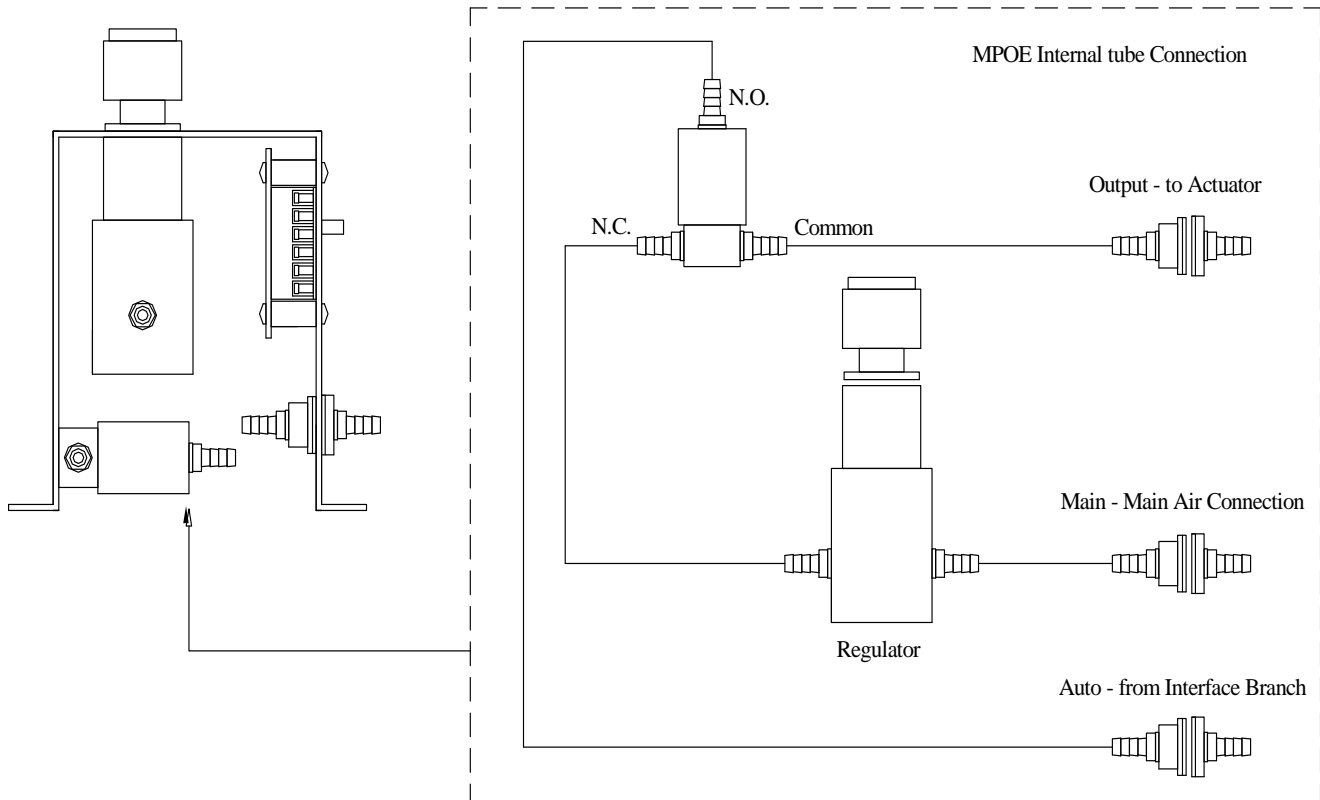
2. **If the 24 volt DC or AC power is shared** with other devices that have coils such as relays, solenoids, or other inductors, each coil must have a diode or DC Transorb (if DC), a MOV or AC Transorb (if AC), or other spike snubbing device across each of the shared coils. Without these snubbers, coils produce very large voltage spikes when de-energizing that can cause malfunction or destruction of electronic circuits.
3. You should measure the actual voltage output of the secondary. If the output is not fully loaded you may read a higher voltage than the circuit board can handle.

## OPERATING INSTRUCTIONS

The Manual Pneumatic Override – Electric Model (MPOE) has two modes of operation, MANUAL and AUTO, as selected by the MAN/AUTO override switch. The MAN/AUTO switch in the manual position provides power to the change-over valve which selects the pressure regulator as the MPOE output source. In AUTO operation, the pneumatic interface (or similar pneumatic control) branch output of the interface is connected through the AUTO input to the MPOE OUTPUT. In MANUAL operation, the change-over valve is powered, the AUTO port blocked from the OUTPUT, and control is switched to the manual pressure regulator to supply the MPOE output pressure.

The state of the ALARM feedback output is N.O. in the AUTO mode unless specified otherwise at time of order.

If there is a loss of power in AUTO operation the output pressure remains the same as the interface output (or similar pneumatic control). If there is loss of power in MANUAL operation the output will default to the AUTO position (AUTO and OUTPUT also connected). If the interface (or similar pneumatic control) is fail-safe (such as the PXP2.2FS, PWP2.2FS or any of their breed type single valve versions) the output will bleed down to 0 psig. If not, the output line will remain at the pressure existing when power failed.



**Power Supply:** 24 VDC or VAC +/-10%  
**Power Supply Current:** 800 mA maximum  
**Alarm Feedback:** N.O. or N.C. contact (Factory Set)  
**Alarm Current:** 1.2 A maximum

**Board Power Supply:** Same as Power Supply  
**Board Supply Current:** 800mA maximum  
**Supply Air Pressure:** 30 psig maximum