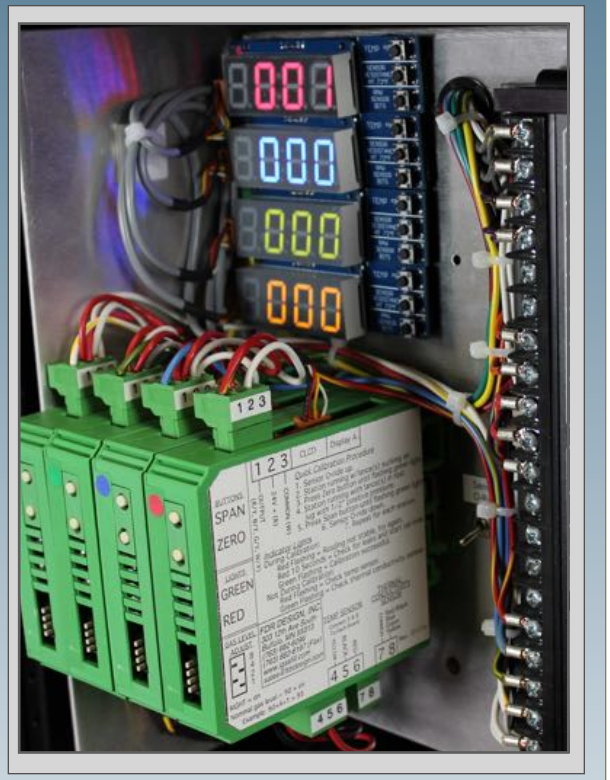
FDR DESIGN, INC.

World Leaders In Gas Filling Technology

Push Button Calibration



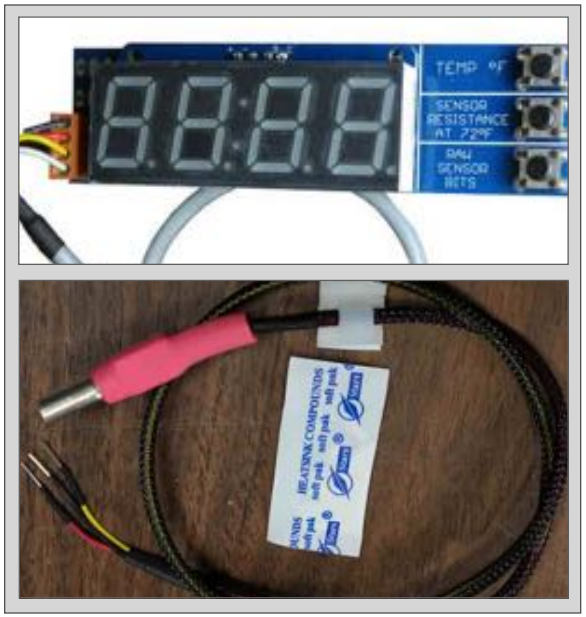
Push Button Calibration

Temperature Compensation

LED Display Diagnostics

Selectable Shut Off

Compatible With Almost All FDR Gas Filling Machines



Benefits

1. Any existing RSG Gas Filling Machine with a thermal conductivity sensor set up for argon gas can be upgraded (which means all FDR machines except the old DCL machines. If you're unsure then please ask). If the gas sensor does not have orange leads then the gas sensor must be upgraded @ N/C.

2. One NEW board will replace one OLD board. If you currently have a four station machine then you can change one station or all four depending on your needs or budget. The new boards fit right in place of the old, similar in size and shape and mount on existing DIN rail. Some minor wiring is involved.

3. Push buttons replace the old potentiometers so you can put away that small screwdriver - just push the button until the green light flashes!

4. Using a voltmeter for calibration isn't required.

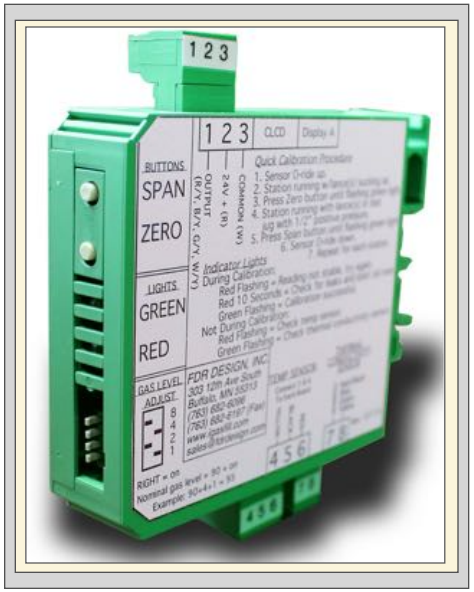
5. Easily accessible dip switches allow the shut off point to be selected.

6. Temperature compensation circuitry holds the calibration through the cool morning/hot afternoon transition.

7. A more stable calibration is achieved as the board profiles the gas sensor.

8. Calibration memory is retained after a power failure or turning the machine off and on.

9. An LED Display can be connected to any Push Button Board for detailed diagnostics. LED Displays may be added at any time.



Parts for a 4-station machine:

Qty 4 : 12111 (Push Button Calibration Board)
Qty 1 of each : 12154, 12155, 12156, 12157 (Display)
Qty 1 : 12110 (Temp sensor)

Installation

1. Install the Temp Sensor in the open end of the heated aluminum block which holds the Orange Lead gas sensors. Only 1 Temp Sensor is required for the whole machine. Thermal conductive paste is included and should be used liberally on the outside of the metal end of the sensor.

2. If replacing all the amplifier boards in the machine then turn the OMRON Temperature Controller all the way down (counterclockwise) to 0. If some of the amplifier boards will be the old style with potentiometers then the OMRON Temperature Controller should be left at 130°. It is recommended to upgrade all of the amplifier boards to the Push Button version.

3. Remove the old amplifier boards.

4. Wire the new Push Button Boards using the detachable terminal posts. Use the diagram on the side for reference.

5. Connect the 7 Segment Display to the connector labeled "Display A".

FDR Design, Inc.
303 12th Ave. South
Buffalo, MN 55313
763.682.6096
763.682.6197 (fax)