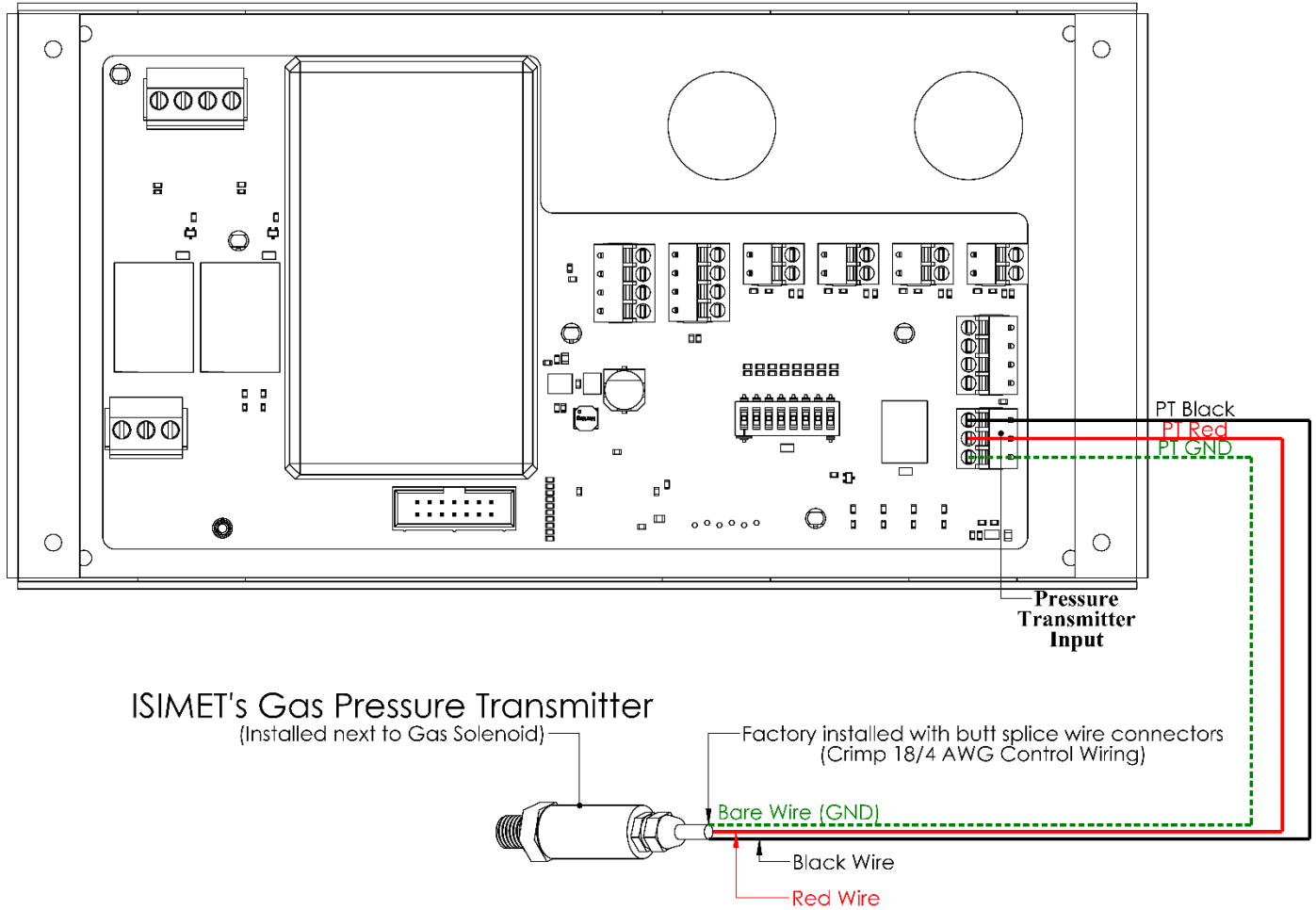


Installation

ISIMET LA_{v2} Utility Controller



The Gas Pressure Transmitter should be installed downstream of the gas solenoid (within 12 inches of the gas solenoid). This will typically be preinstalled in ISIMET’s S-Series enclosure and/or ISIMET’s gas valve assembly. The gas pressure transmitter must be installed in the subsequent gas line controlled by Circuit #1 of the LA_{v2}.

WARNING! The gas pressure transmitter must be removed and the line must be capped prior to pressure testing the gas line and/or flushing the system. Exceeding 45psi while the gas pressure transmitter is attached will void the warranty.

Note: If the gas solenoid needs to be turned on for testing purposes while the gas pressure transmitter is removed from the gas line, the Pressure Transmitter Input plug (LA_{v2}) can be unplugged. This will disable the gas pressure transmitter test. Be sure to plug this back in after testing.

Initial Startup

The LA_{v2} will automatically detect if a gas pressure transmitter is attached and will perform the following tests when Circuit #1 is activated:

Fill Test:

When switch 1 is in the ON position and the service key is turned, Circuit #1 will start the Fill Test. The gas solenoid will open (Circuit #1 will turn ON) and the LA_{v2} will check for a minimum gas pressure of ~6 iwc (0.22 psi) and wait until the pressure is stabilized. The Fill Test has a 30 second timeout period. If gas pressure is not stabilized during this timeout period, the Pressure Test will fail and require a re-keying to restart the test. If, however, gas pressure stabilizes before the timeout period, the system will move on to the Prove Test.

[Circuit #1 green LED will flash slowly (~2s cycle time) when the Fill Test is running]

Prove Test:

After the Fill Test has been passed, the gas solenoid will close (Circuit #1 will turn OFF). The system will monitor the gas pressure for an average increase or decrease of pressure. If the average pressure deviates beyond +/- ~1.5 iwc¹ (~0.05 psi²), the Prove Test will fail. The Prove Test will monitor for pressure loss/gain for a 15 second time period. If the Prove Test passes, Circuit #1 will turn ON and the green LED will stay illuminated.

[Circuit #1 green LED will flash faster (~1s cycle time) when the Prove Test is running]

Low Pressure Test:

After the Prove Test has successfully completed, the system will constantly monitor for high pressure levels. If there is a drastic increase in pressure, a complete loss of pressure, or the pressure transmitter is disconnected, the system will shut off the gas solenoid immediately. The gas line must have a pressure greater than ~6 iwc (~0.22 psi) in order to transition from the Fill Test to the Prove Test. After the Fill Test and Prove Test have completed successfully, the gas line must maintain a pressure greater than ~1 iwc (~0.04 psi).

High Pressure Test:

The pressure of the gas line must not exceed ~27.7 iwc (1 psi).

If any of these tests fail at any point, the Pressure Test Failed red LED will illuminate and the gas solenoid (Circuit #1) will shut off. Rekey the system after one of the following issues has been resolved to retest the system.

- Low Gas Pressure (<~6 iwc during the Fill and Prove Tests and ~1 iwc thereafter)
- High Gas Pressure (>~27.7 iwc)
- A gas leak has been detected
- A gas turret has been left open

¹ iwc – Inches of Water Column

² psi – Pounds per Square Inch