Quick-Installation Instructions for 100-Series Meters And Controllers

SAFETY

1. Apply power only after reviewing the wiring diagrams (on reverse and in Instruction Manual).
2. Apply gas flow only after checking plumbing connections for leaks.
3. **NEVER TEST FOR LEAKS WITH LIQUID LEAK DETECTOR**. If liquid seeps into the electronics or the hidden sensor compartment, the instrument may be damaged. Instead use a pressure-decay test. (If liquid MUST be used at all, limit it to the fittings and keep it off the body of the instrument).

INSTALLATION

4. **Consult the instrument's Data Label (on the rear of the instrument)** for ALL proper operating parameters. If the information on the Data Label does not match your process conditions contact your Representative or Sierra Instruments.
5. **Install a 10 micron in-line filter upstream of your instrument.** If the gas contains any moisture use an appropriate dryer or desiccant. Particles larger than 10 microns and moisture may damage your instrument.
6. **Mount with a horizontal gas-flow**. This orientation is preferable UNLESS the factory calibration was specifically performed for a vertical-upward, or a vertical-downward flow. Consult the Data Label or your calibration certificate.
7. **DO NOT APPLY POWER TO THE OUTPUT LOOP** on units equipped and calibrated for a 4-20 mA output signal. This is NOT a loop-powered device. Damage will occur.
8. **Wire your instrument** per the diagrams on the back of this card or the Instruction Manual, Chapter 2. Power is applied via the mini-D connector. The CAT-5 connector is for the Sierra Remote Pilot Module only. **DO NOT use the CAT-5 connector for Ethernet—damage to your computer system or the instrument may occur.**

OPERATION

9. **Apply the gas** listed on the Data Label to the inlet at the recommended pressure (listed on the Data Label/calibration certificate). Note that all flow controllers are shipped with a zero set point so the valve will not open until commanded to do so.
10. **Apply power per the instructions.** The green LED above the mini-D connector will light to confirm power.
11. **Apply the control set point properly (controllers only).** Your controller (model C100) has been factory configured to receive a control signal from one of several sources: The Pilot Module or external computer ("SO" in model code), or an external analog signal through the 15-pin connector (S1, S2, S3 or S4 in model code). The model code is listed on the top of the rear data label. You may change the requested setpoint control source using your Smart-Trak Software or your Pilot Module (if so equipped). See the Instruction Manual for details.
12. **DO NOT LEAVE A SETPOINT APPLIED FOR AN EXTENDED PERIOD OF TIME TO A CONTROLLER WHEN THE GAS SUPPLY IS SHUT DOWN OR BLOCKED**. Damage will not result, but the instrument will become hot to the touch. Instead, consult the Operator's Manual for use of the "Valve Close" feature which allows you to disable the valve while maintaining the setpoint signal. This may be set by the Pilot Module, the Smart-Trak Software, or an external analog signal.
13. An **ANNUAL factory evaluation and calibration** is recommended.

HELP

Email Technical Support: Service@sierrainstruments.com

24 Hour Website Service: www.sierrainstruments.com (Click "Sales & Service" Button)

Telephone Technical Support:

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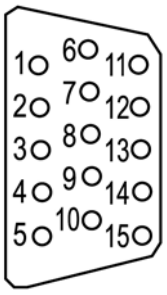
Wiring Functions and Color Codes for Optional Communication Cable

High Density DB-15 Connector Pin Configuration (on the instrument)

Pin #	*Wire Color in Optional Cable*	*Function*
1.	Brown	Analog Ground
2.	Red	0-5 VDC Output (or 0-10, 1-5 VDC)
3.	Orange	Analog Ground
4.	Pink	Valve Override (purge)
5.	Yellow	Power Return (-)
6.	Dark Green	Power Input (+)
7.	Light Green	RS-232 Transmit (out)
8.	Blue	Setpoint
9.	Purple	Not Used
10.	Gray	Analog Ground
11.	White	Reference Voltage (5 VDC External Setpoint & Valve Purge)
12.	Black	Valve Override (shut)
13.	Brown/white	RS-232 Receive (in)
14.	Red/white	4-20 mA or 0-20 mA Output
15.	Red/Black	Chassis (Earth) Ground



Note: Pins 1, 3, 5, and 10 are connected together inside the instrument. Sierra recommends individual wires.

Note: If RS-232 digital communication is to be used in conjunction with the Pilot Module, the mini-plug connection at the bottom of the instrument should be used via the CRS cable included with your instrument. Do NOT use the RS-232 connections on the DB-15 connector when a Pilot Module is functioning (damage to the instrument could result).