



Quick Installation Guide



SAFETY

1. Apply power only after reviewing the wiring diagrams for both your Smart-Trak Model 100 Meter or Controller, and the Compod. See reverse for Compod wiring, see 100 Series Quick Installation Guide or 100 Series Operators Manual for wiring information.

INSTALLATION

1. **Consult the instrument's Data Label (on the back 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 Customer Service. Insure you follow all Smart-Trak Meters and Controllers installation recommendations.
2. **Wire your instrument per the diagramed pinout** on the back of this card and in the Instruction Manual (specific wiring is required for both the Smart-Trak itself, port P3, as well as the Compod). Power is applied to both the Smart-Trak and Compod via the HD DB15 connector (P3) on your 100 Series, or can be chained through multiple units using the Compod P1 and P2 connectors. Please refer to your Compod manual for more information regarding the convenience of daisy chaining.

OPERATION

1. Power the unit. If you are using the Sierra provided power supply, it is recommended you attach the D-sub connector to the Smart-Trak before plugging the adapter into the wall. The unit may take longer to start than normal if otherwise. This will not damage the unit in any way. The green LED above the RJ45 connector will light when the unit powered.
2. **Our Mass Flow Controllers** are shipped with a zero setpoint in Automatic valve operation mode. **For safety considerations, it is recommended you confirm this prior to applying gas to the unit.**
3. *Apply the gas* listed on the Data Label to the inlet at the recommended pressure (listed on the Data Label/Calibration Certificate). Your Smart-Trak *Meter* will begin to measure mass flow. This will be displayed on the user software or on your DD Compod. You can cycle through the DD Display options using the button on the bottom right corner of the Compod.
4. **Controllers** will likely need a setpoint input in order to control flow. **Do so carefully!** You can digitally input a setpoint using the RS-232 user software or via Compod MODBUS. You can still control directly with your analog setpoint source via 100 Series HD DB15. **NOTE:** You can change the setpoint source type using the RS-232 software or the included Compod User Software (RS-485 GUI). The unit ships in the configuration initially chosen (or default if not specified). This information is also listed on the Data Label and on the Calibration Certificate. This information is also inherent in the model code. See the Manual for details.
5. **DO NOT** leave a setpoint applied for an extended period of time to a controller when the gas supply is off or blocked. Damage may result from excessive heating, and the unit will become hot enough to burn you. Alternatively, you can maintain your setpoint value, but close the valve by switching Valve Operation to Closed digitally with the user software or the pilot module, or with an analog ground to the appropriate pin (see over).
6. The Compod User Software is a complete GUI (Graphic User Interface) to set and use all Compod functions. If you chose not to use this program, you may use a basic trial MODBUS program like [KEPServerEX](#), which can be used to access the registers and modify accordingly. **We do not support KEPServerEX.** It can be used for simple functionality testing. You must write your own MODBUS program if you choose not to use the Compod User Software.

Email Technical Support: service@sierrainstruments.com

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Wiring Definitions for Communication Cables (Pinout)

Port	Pin #	Function
P1	1.	RS-485 Shield
P1	2.	+24VDC Power
P1	3.	ID0 – selection bit
P1	4.	ID1 – selection bit
P1	5.	RS-485 – B
P1	6.	ID2 – selection bit
P1	7.	Ground
P1	8.	ID3 – selection bit
P1	9.	RS-485 – A
P2	1.	RS-485 Shield
P2	2.	+24VDC Power
P2	3.	Analog Input 1
P2	4.	Pulse out / Analog Input 2
P2	5.	RS-485 – B
P2	6.	Digital Out 1
P2	7.	Ground
P2	8.	Digital Out 2
P2	9.	RS-485 – A

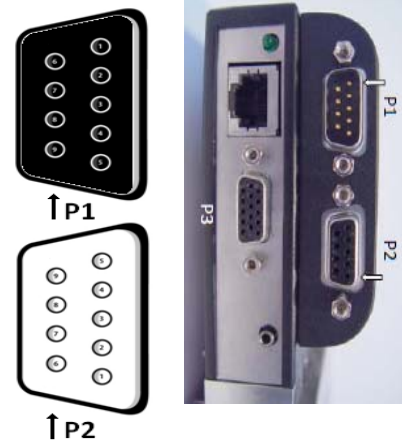


Figure: Pin Locations on Instrument

Note: The pinout for P3 (Smart-Trak Model 100 (HD DB15)) can be found in the Smart-Trak Instruction Manual. Make sure to read your 100 Series Quick Reference prior to operation.

Set up Hardwired ID if desired

ID3	ID2	ID1	ID0	MODBUS ID
open	open	open	open	Internal ID
open	open	open	GND	1
open	open	GND	open	2
open	open	GND	GND	3
-	-	-	-	
GND	GND	GND	GND	15



Compod User Software

- Shipped with every instrument and located on the Product CD. The software is a GUI designed to adjust all Compod function parameters directly.
- Users may also use programs like [KEPServerEX](#). This is a shareware program that will allow you to edit individual registries. Sierra Instruments does not support KEPServerEX. Users who wish to use it should follow the link to the site for a free download. The .opf files and the command set .hex files are on the supplied Product CD.

Communications Cable

To wire RS485 Compod to your PC, you will need an RS232/RS485 converter. Sierra Instruments sells a B&B converter, or you can purchase one independently. We recommend the [U-Linx 485USB9F-2W](#) available from B and B Electronics.

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