

## New Programmable Cryo-cooling and Heating Trap for the Cryo-Focusing of Volatiles and Semi-Volatiles at the Head of GC Capillary Columns.

### Features

- Cooling Chamber is 4" long
- For Use in high flow applications (10-50 ml/min)
- 2 models available  
Model 951 for Liquid CO<sub>2</sub> cooling to -70°C  
Model 961 for Liquid N<sub>2</sub> cooling to -180°C.
- Reduction of CO<sub>2</sub> or LN<sub>2</sub> use by 90% as compared to cooling the entire oven.
- Dual programmable cryo-cooling and heating cycles
- Trap compounds in the GC oven at the head of the GC column.
- Remote input connector for cryo-cooling to heating cycle switching via GC, Desorption system or manually.
- Rapid heating up to 400°C at > 400°C per minute.
- Remote start output signal for starting GC, MS or recorder.
- Custom I.D. sizes available



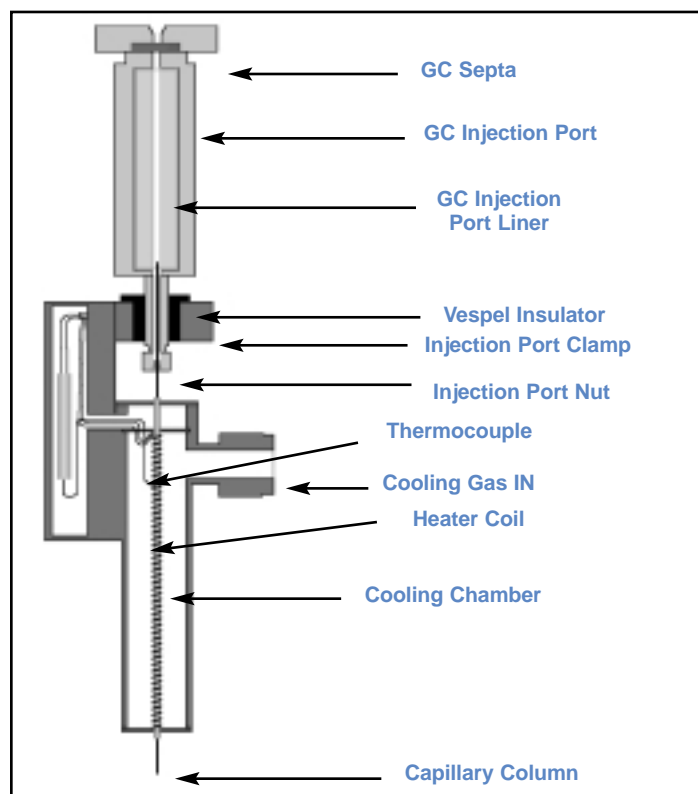
Cryo-Trap Heating and Cooling Controller

### Applications

- Thermal Desorption Sample Trapping
- Purge and Trap Systems
- GC Headspace Sample Analysis
- Multi-dimensional GC applications
- Improve Chromatographic resolution of early eluting peaks

The Cryo-Trap consists of a small heating/cooling chamber which is 3/4" in diameter and 4" long. In the center of the chamber is a small stainless steel capillary through which the capillary column freely passes. Capillary columns up to megabore (0.53mm I.D.) diameters can be used (other I.D.'s are also available). Around the stainless steel capillary tube a heating coil is wound to provide for the rapid heating of the capillary tube. A thermocouple provides accurate measurement of both the cooling and heating temperatures. Either Liquid CO<sub>2</sub> (Model 951) or Liquid Nitrogen (Model 961) for cooling is introduced into the Cryo-Trap, and is exhausted through the outlet which can either be vented into the GC or a tube can be attached to vent external to the GC oven.

The control of the Cryo-Trap is provided via an independent Cryo-Trap Controller provided with the System. Both the Cryo-Cooling and heating temperatures are set via this digital tempera-



ture controller. The system can be used either manually to switch between cooling and heating or can be operated automatically via an input signal from a controlling device.

**For additional applications request the FREE Application Notes available from S.I.S. (908) 788 - 5550**