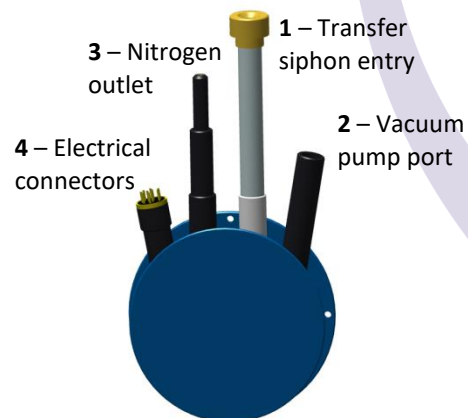


Safety

1. Read the supplied booklet 'Safety Matters' before using the system.
2. If in doubt about the system operation, refer to the system manual.
3. Use appropriate personal protective equipment.
4. This guide assumes a Mercury iTC is being used. If using an alternative controller, refer to the manual for control information.
5. Only vent the OVC when the system is at room temperature and only use dry gas (e.g. nitrogen).

Getting Started

- a) Check you have available all the necessary components you may need for your experiment.
- b) Connect a rotary pump to the cryostat vacuum port (2).
- c) Evacuate the OVC to below 10^{-4} mbar.
- d) Check that the transfer siphon has been evacuated.
- e) Connect all the components of your system.



For technical support, spares and accessories, contact your local regional support team. See the product manual for full details.

Cooling the system

- a) Open the valve on the VCU (by turning anti-clockwise).
- b) Slowly lower the dewar leg of the siphon into the dewar.
- c) Push the other end into the entry arm of the cryostat (1). Engage the nut on the siphon with the thread on the cryostat and tighten it.
- d) Switch on the GF4 pump. The cryostat should now cool steadily.

Controlling at set temperature

- a) Set desired temperature by tapping **Control** and changing the set point to desired temperature.
- b) Select **Auto** in the heater control configuration.
- c) Control the flow by adjusting the valve on the VCU.
- d) For optimum performance, use the flow and PID values in the test results.

Changing samples

- a) Warm the cryostat to room temperature.
- b) Remove the top flange of the OVC.
- c) After changing samples, re-assemble the system and evacuate the OVC.
- d) Repeat the cooldown process as detailed above.

Warming up

- a) Switch off the pump and wait for the pressure in the nitrogen circuit to rise to approximately the storage dewar pressure.
- b) Remove the transfer siphon from the cryostat and fit the bung supplied.
- c) Setting the **Control** temperature to 300K will accelerate the warm up.