

Integrity unit and Glassware not included. Illustration purpose only.

## **ATS20001 – Integrity 10 Inerting Manifold User Guide**

### **INSTRUCTION BOOK**

## Set-up and Operation Guide.

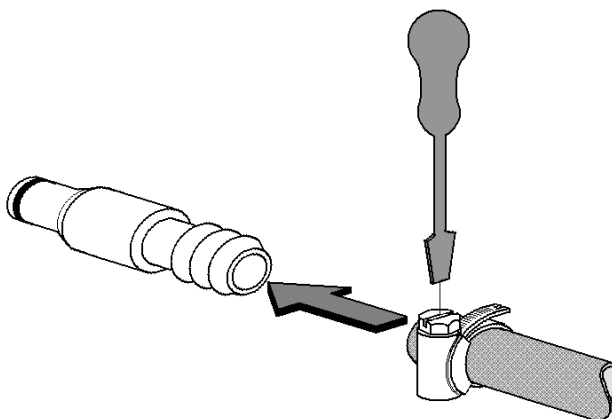
(For use with Integrity10 Reaction Stations).

**In order to gain the most from your Reflux & Inerting Manifold unit please take the time to read this guide carefully.**

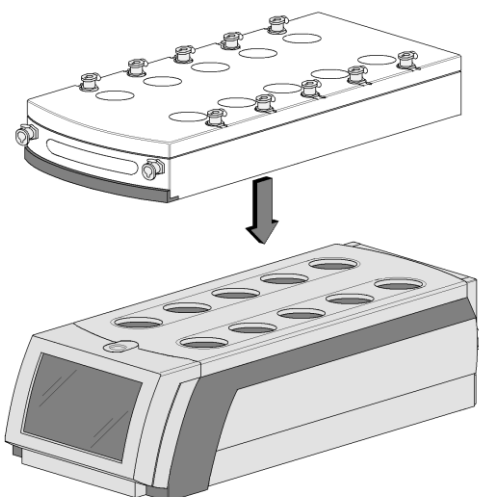
**1**

Connect your send and return chilled fluid to the straight barbs supplied with your Reflux and Inerting manifold. Ensure your hose connections do not leak.

*You may wish to use jubilee clips.*



**2**



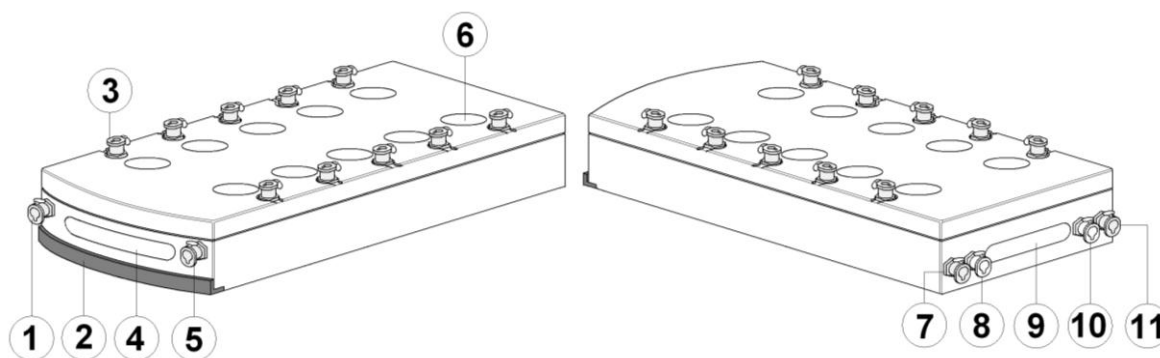
### ATTENTION:

Located at the front and back of the manifold are grab recesses designed for ease of transportation. Please avoid lifting your Reflux and Inerting manifold by the gas or liquid connects as they may become damaged and broken.

Place the reflux and inerting manifold onto the Reaction station block ensuring the front foot of the manifold aligns with the sliding catch of the reaction station drip tray. Check and ensure the wells align with the reaction block tube positions.

**3**

**Over view.**

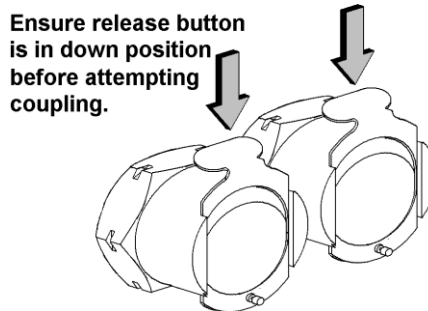


1. Gas outlet left hand
2. Drip tray.
3. Vessel head coupling
4. Grab handle (front)
5. Gas outlet right hand.
6. Well positions

7. Gas inlet right hand
8. Coolant inlet
9. Grab handle (rear)
10. Coolant outlet
11. Gas inlet left hand

- 4 Push fit the straight Barb connections previously fitted to your chiller coolant supply into the two rear inlet coolant bayonet sockets. Ensure the release button is in the down position before attempting coupling.

**Note:** To release the connectors press down on the release buttons.

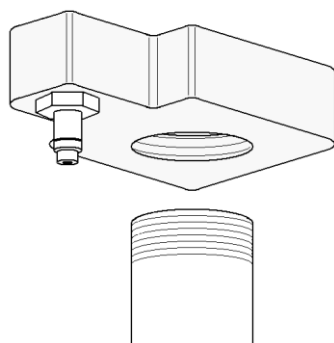


- 5 The fittings on the upper side supply a positive pressure of inerting gas to the tubes via PTFE reactor heads. These are fed from the outer two fittings at the rear of the unit and vented from the two fittings at the front. The reflux and inerting manifold has two separate gas circuits, one on each side which if desired can be static or free flowing if the male connector is fitted to the front. All gas fittings include check valves prevent gas flow when the supply connection is broken.

**Note:** When using a static gas feed it is recommended that a bubblers be included at the feed in order to avoid over-pressure at the reactor vessel(s).

- 6 Connect the gas feed to the Reflux and inerting manifold. Use a 'T' coupler to connect a single gas feed to both gas inlets. Insert the gas bubbler to prevent over-pressure at the reactor vessel. If a flow of gas is required through the reactors, connect a second T coupler to the front gas outlets. When a gas bubbler is not fitted to the T coupler, blank off using a reactor seal.

7



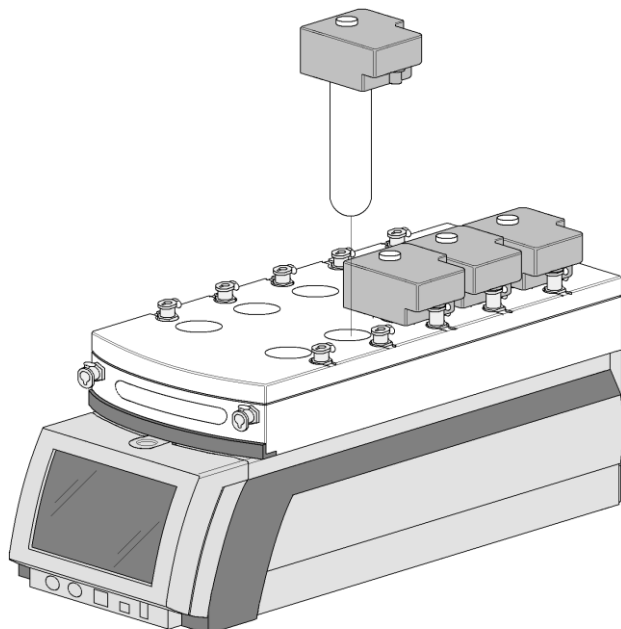
Charge the glass vessel with the reaction chemical mixture and screw to the PTFE inerting head.

- 8 Position the tube / head assembly in the appropriate well and push down until the fitting clicks to engage the gas supply.

The PTFE inerting head includes an access port for a PT100 temperature sensor. (For use with the Multitemp module). If a PT100 is not fitted the port should be closed off using a blanking plug.

**Note:** Ensure the release button on the manifold fitting is in the down position before attempting coupling. Each vessel is independent so it's not necessary to include all ten vessels for the inerting to function.

Operate you Integrity 10 Reaction Station as per the Operator guide. M8024

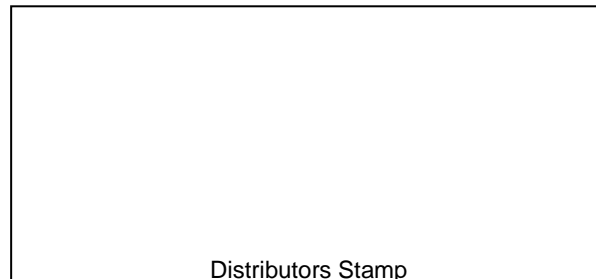


- 9 To remove the vessel, simply push the release button on the fitting attached manifold. The vessel and PTFE reaction head will be ejected ready for removal from the Reaction Station. The check valves will shut off on the reaction vessel ensuring the contents are maintained under a protective atmosphere.

CE marked products and associated accessories covered by this Instruction book conform to the essential requirements of the following directives:

EMC Directive.  
Low Voltage Directive.

A full copy of the EC Declaration / Conformity document can be obtained from the manufacture at the email address [info@electrothermal.com](mailto:info@electrothermal.com)



**Electrothermal.**

Electrothermal House.  
Unit12A, Purdeys Way.  
Purdeys Industrial Estate.  
Rochford,  
Essex. SS4 1ND  
Great Britain.  
Tel +44(0)1702 303350  
Fax+44(0)1702 468731

Email: [info@electrothermal.com](mailto:info@electrothermal.com)  
Http [www.electrothermal.com](http://www.electrothermal.com)

**For the America's and Canada, contact:**

**Techne Incorporated**, 3 Terri Lane,  
Suite 10 Burlington, NJ 08016 USA.  
Toll free:800-225-9243Tel: 609-589-2560  
Fax: 609-589-2571  
Email: [labproducts@techneusa.com](mailto:labproducts@techneusa.com)  
Http [www.techneusa.com](http://www.techneusa.com)

© 2011 Electrothermal. All rights reserved.

Printed in Great Britain