

## Delta T Brain Slice Adapter Instructions

### Description:

The Delta T Tissue Slice Adapter is designed to allow observation of a live, cut section of brain tissue in the Delta T System. It offers a defined optical aperture at the appropriate focal plane relative to an objective's plane of focus on an inverted microscope while simultaneously providing perfusion and temperature control.

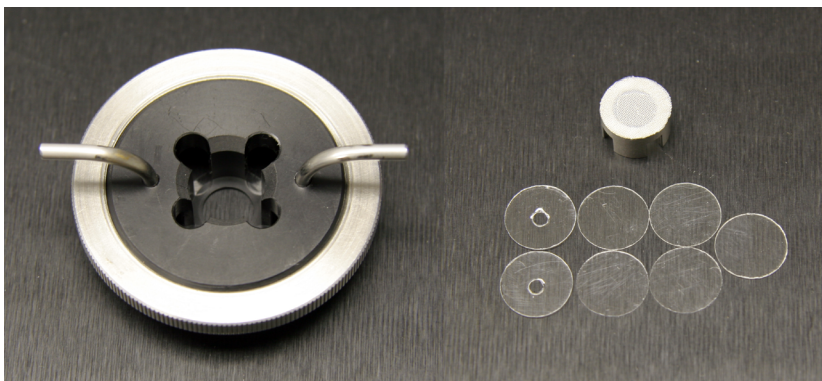
The Delta T Brain Slice Adapter includes an aperture device (Delrin or Radel R threaded insert) which mates to an internally threaded metal ring, seven polycarbonate disks (10mm diameter by 0.25mm thick, two with a hole in the center and five blanks), two perfusion tubes and a stainless steel weight with nylon mesh on the bottom surface.

### Instructions:

1. Place the disk into the vented depression of the black Delta T Brain Slice Adapter with the adjustment ring attached.
2. Place your brain section over the hole in the disk, followed by the vented stainless steel cylinder nylon mesh; mesh side down.
3. Next place the adapter assembly into the Delta T Dish and adjust the depth of the specimen relative to the objective by rotating the metal ring on the perimeter of the adapter until the specimen falls within the range of focus of your objective.
4. Perfuse the specimen by attaching 1/16" Tygon 2275 tubing to the stainless steel perfusion tubes. The perfusion tubes are friction fitted and can be adjusted by gently twisting them while forcing them to the desired depth.

### Sterilization:

The Delrin or Radel R portion of the adapter can be cleaned with laboratory soap followed by (1) fresh water rinse and (2) 70% alcohol. If further sterilization is necessary, Delrin Acetal or Radel R resin can be autoclaved at 120°C for 15 minutes.



### Note:

If your experiment requires special characteristics other than those provided with the Delta T Brain Slice Adapter, please contact Biotech for modifications or specialty services. Biotech appreciates feedback from our customers so we may continue to improve our products. Please inform us as to how you are performing your experiments and how we may better serve your needs. Thank you for your interest in our products.

### Continual Brain Slice Perfusion with the Delta T Micro-Perfusion Pump:

The Delta T Micro-Perfusion Pump is shipped with dual channel tubing. When the tubing pair is stretched around the rollers on the pump, the tube with the black band will have a slightly smaller ID yielding a slower fluid transport capability. Attach the supply line from your media to the barb on the input side of the black band pump tubing and another tube from the output side of this tube to the irrigation port of the Brain Slice Adapter. Attach tubing from the aspiration port of the Brain Slice Adapter to the input side of the other pump tube and a line from the output side of this pump tube to a waste container. Adjust the pump speed as needed for suitable perfusion rate.