

Multi-well Stable Z Instructions

Description:

The Bioptechs Multi-well version of the Stable Z warmer is designed to accommodate all four of the Nunc brand ChamberSlides™ and is regulated by the standard Stable Z controller. It fits into any stage that is adapted to accommodate a SBS format plate.

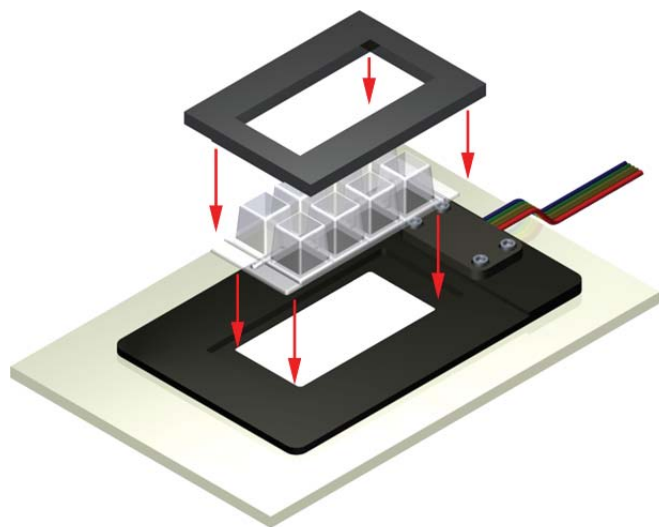
Instructions:

Simply prepare your cells as usual in the Nunc brand Chamber-slide™ and place it in the opening of the stage adapter machined to receive it. Then place the magnetic support frame around it to both hold it in place and assist heat transfer around the wells. The standard lid that comes with the Chamberslide™ can be placed used to cover the wells. There is no adjustment necessary of the relationship between the specimen plane and the support surface of the heating structure on the stage adapter as there is on the 35mm dish version. This is because all configurations of Chamberslides 1, 2, 4, or 8 well have the same footprint and the coverslip is in direct contact with the heated insert. Heat propagates peripherally to the specimen area by means of a combination of thermal radiation and conductivity from the surrounding heated plate. Heat generated to warm the specimen is isolated from the stage surface by the ceramic plate surrounding the heating plate. A reference thermistor is included with the Stable Z controller to take readings of the temperature in the Chamberslide™. It will be necessary to adjust the Setpoint of the controller to obtain the desired temperature of the specimen. This is a trial and error process depending on ambient conditions, use of a lid as well as the number of wells in the Chamberslide™.

Note:

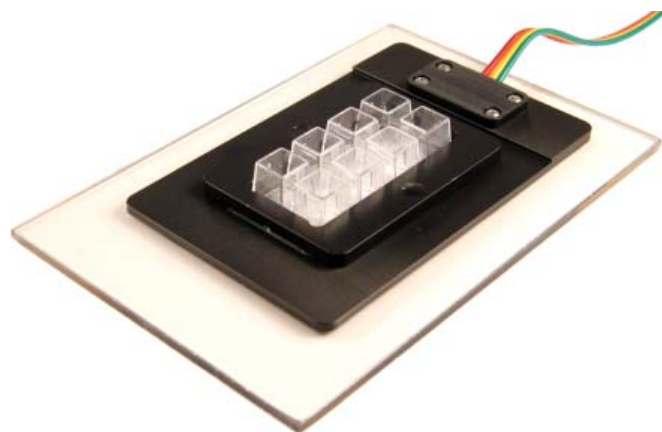
If high numeric aperture lenses are used (water, glycerine or oil) an objective warmer will be necessary to prevent heat loss from the point of contact where the optical coupling fluid touches the coverslip.

Figure 1



First place the Chamber-slide into the Multiwell, Second place the support frame on top of the Chamber-Slide

Figure 2



Assembled Multi-well Adapter