

## EDU Thermal Slide System Instructions

### Description:

The Bioptechs EDU Thermal Slide System provides the user with a convenient means of observing temperature controlled specimens on an upright microscope. Specimens are placed on a 25mm x 60mm specially treated slide that is then inserted into a slide carrier and placed into the specimen holder on the microscope stage. It is easy and quick to use. Please review the simple setup and operation instructions prior to use.

### Setup Instructions:

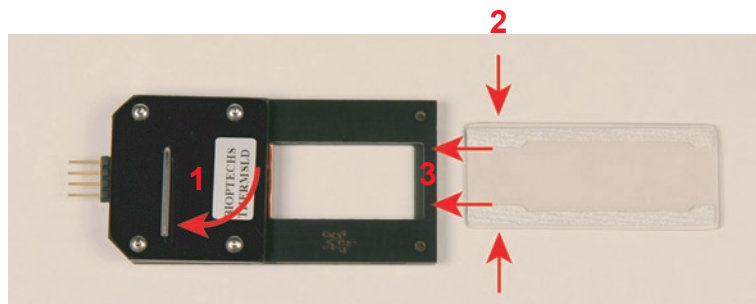
1. Select the appropriate connector for your AC service and attach it to the power supply. Remove the place holder by depressing the plug retainer tab located on the back side of the power supply, and replace it with the connector of your choice. (Figure 1) Plug the power supply into your AC outlet.
2. Check the orientation of the slide release lever (#1), make sure it is in the orientation as shown (Figure 2).
3. Load a slide into the Thermal Slide carrier with the silver side down in the orientation shown, please note the difference in electrical pads on the slide (#2) this is critical for proper thermal regulation, insert slide into slide carrier (#3). (Figure 2)
4. Insert the 4 pin mini-DIN connector wire into the side of the controller (Figure 3), plug the other end of the wire having a flat 4 pin connector into the thermal slide carriers gold pins. Polarity does not matter.
5. Place the Thermal Slide carrier with the Thermal Slide on the microscope stage. (Figure 5)
6. Plug the power supply cord into the side of the controller. One temperature LED will light on the controller.
7. Press the [TEMP SELECT] button to select the desired specimen temperature (28, 30, 37, or 41 °C).
8. Press the [RESET] button on the front of the controller and wait 2 minutes before placing a specimen on the Thermal Slide.
9. Confirm temperature has reached setpoint when “Ready” light is lit first time. It may go out and back on from time to time indicating that it is actively controlling within 0.2°C of setpoint.
10. **Note:** If the unit is left turned on without a slide in the retainer press the [RESET] button and wait 2 minutes again before applying another specimen or until the “Ready” light is illuminated green.
11. Place your capillary tube on the Thermal Slide and begin microscopy, the heat will transfer in seconds.
12. To remove Thermal Slide from Carrier, rotate lever on Carrier (#1) then pull Thermal Slide away from Carrier (#2). (Figure 4)

Figure 1



Locations to install controller stand

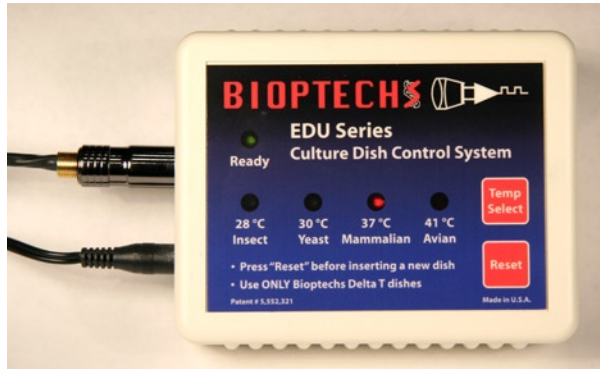
Figure 2



Loading a Thermal Slide into the carrier

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Figure 3

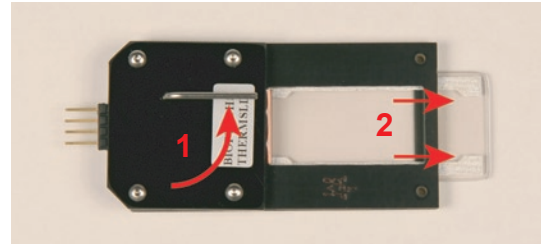


Stage Adapter  
4 pin mini-DIN

Power Adapter

Location and description of cables

Figure 4



Thermal Slide removal from carrier

### Operation:

Upon power-up the EDU will display one of four temperature settings.

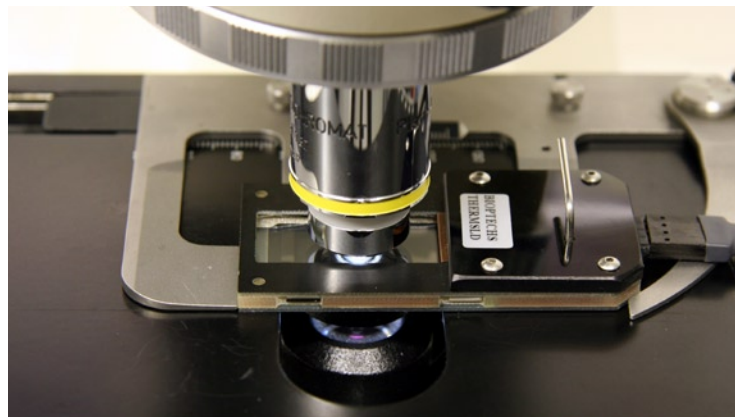
- 28 °C applicable to insect observation
- 30 °C applicable to yeast
- 37 °C applicable to mammalian specimens
- 41 °C applicable to avian specimens

Pressing the **SELECT** button will cycle through the temperatures. Within about 2 minutes a green LED above the word **Ready** will light. This indicates your specimen has reached your setpoint temperature. The ready light might go out occasionally. This is normal. There is no need for concern unless the ready light stays out for more than 30 seconds.

### Cleaning:

Wipe the controller with a damp cloth or mild water based cleanser. Do not use solvents. The Thermal Slide Carrier can be cleaned with alcohol. Do not immerse Carrier or Controller in liquids! The Thermal Slide can be cleaned with a mild soap wash, and alcohol. Do not use a wet Thermal Slide as it can damage the Thermal Slide Carrier, dry slide before use.

Figure 5



Thermal Slide on microscope