



Biotech's Objective Heater (Elyra)

To Start . . .

1. Before you turn on the objective heater controller (electronics box), string the objective heater through the tray on the bottom right of the microscope black box. Put the objective heater on the inner column of the objective.
2. Turn on the objective heater controller.
3. Is the red LED out? If not, tighten controller using the setscrew on the objective heater (5/64 hex key). When the red LED is on, the objective heater is not making good contact with the objective.
4. The select button determines which temperature is being displayed. Use the up and down arrows to adjust the setpoint. Heating will happen when objective temperature < setpoint. The reference wire (blue) is just an extra thermocouple for measuring wherever you want to measure.
5. Suggested setpoint (measured using 2 ml of PBS in a MatTek dish using the 100x/1.46 objective):

Setpoint = 37.0°C: Results in a temperature at the center of the dish equal to 36.1°C. (Note that it is better to err 1°C low than 1°C high!)

When you are done . . .

1. Turn off the objective heater controller.
2. Clean off your objective.
3. Remove objective heater and bring it back outside the box.
4. Clean off the reference probe if you used it.



Setting up objective heater around objective