

Air-Therm[™] ATX

Heater Controller for bioscience laboratories

Quick Start

- **1.** The chamber to be heated should have two 2.5-inch ports for air circulation. Using the two lengths of hose included, connect the Air-Therm to your chamber so that heated air is introduced into the top of the chamber and cooled air is withdrawn from the lower part. The circular clamps should be used to keep the hoses from slipping off the port flanges.
- **2.** Connect the temperature sensor cable to the back panel of the Air-Therm. Feed the temperature sensor into the chamber and place it at the desired position. The most common position is at the back of the microscope stage.
- **3.** Turn on the power switch on the back panel next to the power cord connector. The upper display of the Watlow PID controller should show the current room temperature in degrees Celsius.
- **4.** The heater power is controlled with the switch labeled "HEAT" on the front panel of the Air-Therm. This should be turned off until the Air-Therm is completely set up for the experiment.
- **5.** Fan speed is adjustable from approximately 20 to 50 CFM (0.55 to 1.4 cubic meter/minute). Higher fan speeds allow the Air-Therm to respond to temperature variations faster and more precisely, especially for larger chambers. Once the temperature reaches the set point, it may be turned down for quieter operation without sacrificing temperature stability.
- **6.** Use **\OMEga** and **\Omega** to adjust the temperature set point on the lower display of the Watlow controller to the desired value.
- **7.** Turn on the front panel "HEAT" switch. Probe temperature (upper display) should begin to rise toward the set point (lower display). Once it stabilizes (this could take several hours), the temperature should remain within 0.2 °C of the set point.