Temperature Switching Differentials:

0.2 degrees Fahrenheit.

- This means if the thermostat is set to 99.5 the thermostat will turn the heater on when sensor falls below 99.3 and turn off when the sensor reads above 99.7
- The actual temperature range inside your incubator WILL be more than 0.2 F, because it takes time for the heater to warm and cool. Some factors that affect the temperature range are: 1) the thermal mass and wattage of your heating element, 2) the amount of circulation in your incubator and 3) the placement of the sensor in relation to the heater and fan.

Temperature Calibration:

You can adjust the thermostat reading to match a trusted thermometer. Example: If your trusted thermometer is reading 98.8 and the thermostat is reading 99.5, you would enter a value of -0.7 in the calibration menu. (Calibrate in 0.1 degree increments up to +/- 5 degrees). In order to enter calibration mode, press and hold the down arrow for 5 seconds. The screen will start flashing, use the up and down arrows to set a value between -5.0 and +5.0. Wait 5 seconds and thermostat will save calibration value and return to main temperature screen.

Key Lock:

Allows you to set the temperature and lock the keys so it cannot be changed without unlocking the keys (keys are locked by pressing both up and down buttons for 5 seconds). 6 bars will be displayed at the bottom of the screen when the screen is locked.

Tips:

It is important to place the fan/heater units in a central location that allows for good airflow for consistent temperature throughout the incubator. If you find you have cool spots in your incubator, you may need to add an additional fan or two to better circulate the air. This is especially true for large or odd-shaped incubators.

Give your incubator plenty of time for the temperature to stabilize before placing eggs in the incubator. We recommend stabilizing for 24 hours to ensure everything is running properly. Be sure to include the water in your incubator during the stabilization process that you will use for humidity control.

IncuKit XL™ Basic

for cabinet incubators

by INCUBATOR WAREHOUSE

Package Contents

Congratulations on your purchase of the all new IncuKit XL™ Basic. This kit includes a thermostat module integrated with either one or two fan and heater modules, depending on which option you selected. This great little device will allow you to control the temperature and air circulation in your incubator.

There are two main parts of this IncuKit™:

1. The control module
2. The fan/heater unit(s)

Installation

Due to the nature of the IncuKit XL™ Basic, the specific way to install will depend on your specific configuration. But here are some basic things to help you get started.

Determine where you will mount the thermostat.

The thermostat is designed to be mounted on the outside of the incubator container. Cut a hole in the side of the incubator just large enough to push the white connector wire and temperature probe through. Then use a pencil or pen and mark where the mounting holes should be drilled.

There are three sets of wires coming out of the back of the control module.

1. Power cord: this plugs into a standard power outlet. When you are ready to turn on the IncuKit, plug this into a 110/120V power outlet (or 220/240V if you purchased the 220/240V version).

2. Two thick black sets with a white connector on each end: the white connector snaps into the white connector on the end of the wires of the fan and heater module.
3. The black wire with the sensor on the end is the temperature sensor.

IMPORTANT NOTE: *The thermostat is designed to work with the heater and fan units supplied in the IncuKit™. Using the control module with a different heat source will void the warranty.*

This thermostat needs good ventilation to prevent the thermostat switch from overheating. Mount the thermostat using the spacers provided and make sure nothing is obstructing the vents on the back of the thermostat case. Mounting this thermostat so the vents are covered will VOID the warranty and could be a potential fire hazard. Make sure to seal the hole where the wires come through the incubator wall to prevent moist air from getting into the thermostat circuitry.

STEP 1:
Install Screw & Spacer

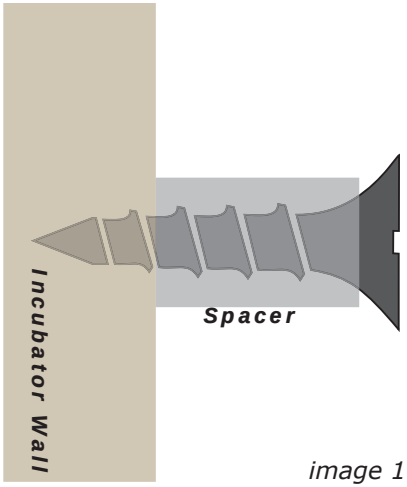

image 1

STEP 2:
Attach Thermostat to Screw

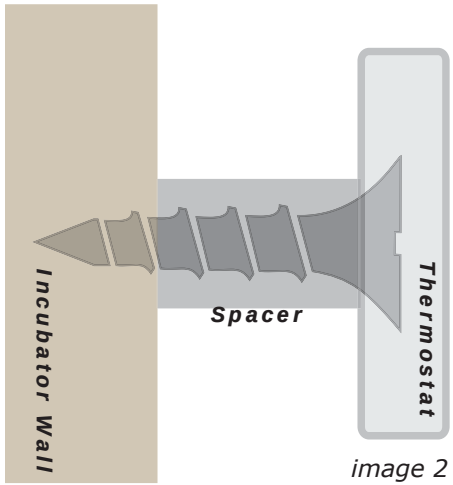

image 2

See our online video for a simple demonstration of the entire installation process. http://youtu.be/OOONmR86X-c

Installing fan/heater units:

1. Choose a location for the fan/heater module(s). The ideal location for mounting is from the ceiling of your incubator equally spaced from the walls and each other. This will provide even air circulation throughout your cabinet. If it is not possible to mount from the ceiling, select a side wall that will provide the most un-obstructed path for air to circulate. You will want to also consider where you want the thermostat mounted on the outside of your cabinet, taking into account the wire lengths.
2. Put each fan/heater module with the blue mounting plate against the ceiling or wall and use the mounting screws to mount. There are four mounting holes. The mounting hole behind the power wires does not need to be used. NOTE: do not over-tighten the screws or the mounting tabs may crack or break. We recommend NOT using an electric drill as it is more likely to crack the mounting tabs. Also, there will be a small gap between the mounting plate and the wall due to the nuts on the face of the mounting place. Do not try to eliminate this gap.
3. After mounting the thermostat and fan/heater module and connecting the wires to the fan/heater unit, plug the power cord into your wall outlet and this will turn on the control module. Position the temperature sensor in a location that will be as close as you can to the level of your eggs.

Operation Instructions

Basic Operation and Features:

This thermostat is preset to 99.5 F (37.5 C) and is very simple to use and is great for small and cabinet incubators. Just press the up or down arrow once and the screen will start flashing. To set the temperature press the up or down arrows until the desired temperature is displayed, wait 5 seconds and thermostat will save the set point value and return to main temperature screen. There is a flame indicator on the screen that shows when the heater is operating. The white thermostat case is mounted on the outside of the incubator and the remote sensor is placed inside the incubator. This allows you to measure the temperature next to your eggs!

Celsius/Fahrenheit:

Make sure unit is unplugged, open the thermostat case by using a screwdriver to press tab on bottom side of thermostat. You will see a small set of switches. Change switch 1 to OFF for Fahrenheit or ON for Celsius. **DO NOT** change any other switches.

Temperature Set Point:

Can be 41-113 F (5-45 C). Built-in memory will store your set point in case of power failure. *(See Basic Operation and Features to change set point)*

Digital Display:

Displays temperature to the tenth of a degree *(example: 98.0, 99.5).* When temperature is over 99.9 the display will read 00.1, 00.2, ... 01.1, ...02.0

Voltage:

110V OR 220/240V AC Power (depending on the model purchased)