

## Precision Reptile Incubator

### Owner's Manual

### Owners Manual



Avey Incubator, LLC

P.O. Box 279

Hugo CO 80821-0279

Customer Support [www.aveyincubator.com/support.htm](http://www.aveyincubator.com/support.htm)

Email: [aveyincubator@gmail.com](mailto:aveyincubator@gmail.com)

### Reptile Incubator

1. Water bottle rack. The water bottle rack and 10 water bottles function as a heat sink. Heat is absorbed by the water bottles and aids in fast recovery of the temperature when the lid is opened. This is one of the secrets to a stable temperature control. The heater and fan are located on the inside-front wall of the Cooler, heated air is piped down to a plenum (air chamber) at the bottom of the Cooler. From there the heated air spreads out, naturally rising, heating the water bottles, and eventually the water in the bottom of the egg box before re-entering the housing on the wall of the Cooler, where the temperature is sampled and the process repeats itself. ***Be sure the heater pipes are properly seated in the (water rack) at the very bottom of the incubator. (This is the most common error made by the end user – failure to have both heater pipes seated in the bottom rack will cause a temperature imbalance)***  
A hair dryer will warm the hoses up and make them pliable.
2. Zero Substrate Egg Box. Capacity 6 deli cups.
  - a. Place 7-8 eggs per deli cup. Place a thermometer probe in the egg mass to monitor the actual temperature of the eggs. Adjust the incubator

setpoint to get the proper incubator temperature as indicated by the egg mass itself.

- b. The main purpose of the zero substrate eggbox is to provide a precise way to control humidity. Pour water in the bottom of the eggbox – about 1” deep. The eggs are placed in deli cups or Tupperware trays on the tray (middle shelf). With all the vents in the top lid closed you should be at 100% humidity. Many users report that only a tiny opening – maybe ¼” in one adjustable vent gives them the humidity they need.
  - c. Another nuance used by our customers is to pour enough water in the bottom of the incubator itself so that a relative humidity of 65% (not higher or risk damage to the electrical parts) is achieved in the incubator proper. This provides for a buffer between the dry outside room and the nearly 100% humidity in the eggbox. Which means the water in the eggbox will last longer. The water should last about 2 months in the eggbox. Some users also put a drop (watch this – no more than a drop) of Clorox Bleach in the water to retard bacteria.
  - d. We provide more vents so you can vent the air closest to any condensation that might form on the lid. Condensation drops should not drip on the eggs. When opening the eggbox - tilt it open so any drops run to the side and out of the way.
  - e. You don’t have to use our zero substrate eggbox. More traditional methods with vermiculite or other substrates may be more comfortable to you. But our Zero Substrate system is trending toward being the method of choice to control humidity when incubating difficult to hatch eggs.
  - f. . You now have the ability to precisely regulate both the temperature and humidity throughout the incubation process.
3. Clear Inner Lid – helps keep the heat in and allows to visually check the eggs without disturbing them.
  4. Air Supply
    - a. Outside air is brought in through the vent openings in the top.
  5. The incubator is optimized to be run at 67-70 degrees ambient room temperature. This gives a spread of 16 degrees or more between the ambient room temperature and the setpoint. If your ambient room temperature is 70 –75 degrees you may find that the inside temperature of the incubator will rise above the setpoint. This is caused because there is always some heat from the electronics being added to the incubator (even though the thermostat and heat element are turned off) and the incubator is so well insulated that this tiny amount of heat can raise the temperature if the spread between the setpoint and ambient gets too narrow. The solution is to let some heat “leak out”. Do this by opening the lid of the incubator about ¼”. Above 75 degrees you may have to leave the outer lid open a little more to vent enough heat to allow the thermostat to work properly. A little bit of change here goes a

long way. Make any changes in small increments and wait 4-5 hours before making another change.

6. Adjusting the Temperature Setpoint.
7. Selection knob
  - a. The selection knob has 2 operations. Push in to start and push in to finish a selection and turn left or right to change the selection. (Push in and then release - some people try to hold the knob in and then turn the knob while it is held in - this won't work! Push in means push and release)
  - b. Password
    - i. Your password is 5 (default)
    - ii. Push in the selection knob.
    - iii. When prompted dial in your password.
    - iv. Push in selection knob
      1. If you wait too long the operation times out and the incubator resumes normal operation.
      2. If you dial in the wrong password the Incubator resumes normal operation
      3. If you dial in the correct password the Incubator moves to the temperature selection screen.
  - c. Temperature Selection
    - i. Dial in the desired temperature. No decimal point is displayed. 300 means 30.0 The display will change as you turn the knob.
    - ii. Push in the selection knob to set.
8. LCD Display (Liquid Crystal Display)
  - a. Displays the temperature in both Celsius and Fahrenheit.
  - b. Automatically uses the last settings even if the power has been off.
9. Cleaning
  - a. Windex and a soft cloth will be all that is needed to keep your Incubator clean. Spraying with Nolvosan or a 10% diluted bleach solution will disinfect the Incubator. The water bottle rack, egg box table, water bottles and heated air pipe may all be removed and submerged in a sink to disinfect. The interior walls and rear housing can be wiped down with disinfectant or Windex to clean.
  - b. The clear inner lid is made of a scratch resistant acrylic but for best performance should be wiped with a clean cotton washcloth (not a paper towel. Paper towels are more abrasive than cotton)
10. High/Low Temperature Alarm
  - a. The high temperature alarm is pre-programmed for about 2 degrees higher than the setpoint temperature. The low alarm about 4 degrees below the setpoint.
  - b. If the high/low temp alarm sounds - push in the selection knob to silence it and then investigate what caused the alarm in the first place.
11. Warranty. Your incubator comes with a one year parts and labor warranty. All you are responsible for is the shipping costs to and from our shop. If you need service call 1-877-283-9462 or email us at

[service@aveyinc.com](mailto:service@aveyinc.com) We will supply you with return shipping instructions and a return authorization number.

12. Returns will be accepted for 15 days after shipping date on unused equipment returned in the original packaging. You must call for return authorization or shipment will be refused. Shipping charges and arrangements are your responsibility. A restocking charge of 20% will be assessed. Packages must be insured. You need to call and notify us on the day you ship your return, be prepared to supply your tracking number.