



EGG INCUBATORS AND ACCESSORIES FREQUENTLY ASKED QUESTIONS

- 1. Where do I get eggs from and how do I store them?** *You can get eggs from a local hatchery, over the internet, or from your own flock. If you get them from your flock, and you have a rooster, you can expect most of the eggs to be fertile. If you have them shipped, chances are the hatchability will be less – perhaps only 50%. Store them in a clean carton with the small end down at temperatures between 40-60 F for no more than 7 days. Allow them to warm up to room temperature before putting them into the incubator.*
- 2. At what temperature should the Incubator be run?** *99.5°F as measured on the glass probe thermometer included with the Incubator. This thermometer may need to be calibrated with a thermometer you know to be accurate (such as a meat thermometer) before operating the unit, as it may have shifted somewhat during shipping.*
- 3. Where should the glass probe thermometer be placed?** *On top of the eggs near the center of the incubator. If you are unable to read the temperature on it while looking through the windows, then you can move it over to one side or the other.*
- 4. How long should I run the Incubator before placing the eggs in it?** *We recommend running the incubator for at least 6-8 hours or more to give enough time to dial in the temperature to 99.5°F.*
- 5. How do I set the eggs?** *Place your eggs with the small end facing down. Note that when you add your eggs, the temperature will immediately drop. DO NOT ADJUST THE THERMOSTAT. The temperature drops because (1) you've opened the lid and let the warm air out, and (2) because you've put eggs inside that may be 20 degrees cooler than the inside of the incubator. Wait several hours and if the temperature is still low, you can make a very small adjustment. We recommend not doing anything for the first day after you set the eggs.*
- 6. What are the different wires hanging down on the inside of the digital incubators?** *The single black wire with the plastic backing is the temperature sensor. This should either lay on top of the eggs with the plastic facing down, or dangle slightly above the eggs and near the other thermometer. The red wires with the blue plastic end is the humidity sensor. This should hang slightly above the eggs. Do not allow either the temperature sensor or the humidity sensor to come in contact with the eggs, the egg turner, the metal screen, or the motor as this will affect the temperature readout.*
- 7. Why does the temperature fluctuate?** *There are numerous factors that cause temperature fluctuations inside the incubator. These include, but are not limited to, room temperature variations, air currents/drafts outside the incubator, number of eggs in the incubator, type of incubator used (still vs forced air), use of egg turner. You must continue to monitor the temperature throughout the incubation process and adjust the temperature if necessary. Since no two environments are the same, it will often be a process of trial and error to dial in the settings for your situation. Also understand that the temperature inside the egg itself will change much more slowly than the reading on your thermometer.*
- 8. What are the little trays/grooves in the bottom of the inside of the Incubator?** *These are the water channels where you put water to increase the humidity.*
- 9. What humidity should the Incubator be at and how do I get it there?** *We recommend a general humidity level of 50-60% during the Incubation period, and raising it to 65-70% during the last 3 days. Start by adding distilled warm water to the water channels and then just monitor the percent humidity level on digital display. If you're having trouble getting the humidity up, you can also put a wet sponge in the corner of the incubator.*
- 10. How and why should I ventilate the Incubator?** *Ventilation is important because fresh oxygenated air is needed for the respiration of the developing embryos. Oxygen needs are small during the first few days and greater as*

the incubation period goes on. You can remove 1 of the red vent plugs on the top of the Incubator a couple weeks after placing the eggs and then remove the other red vent plug when the chicks start to hatch. This will help them dry out.

11. **When should I stop turning the eggs?** *Whether you are turning by hand or using our Model 3200 Automatic Egg Turner, you should stop turning the eggs at Day 18 (or with 3 days to go when incubating eggs with longer incubation periods). Remove the eggs from the turner and place on the metal screen. Raise the humidity level to about 70% and try to refrain from opening the lid these last 3 days.*
12. **What is Candling and why should I do it?** *Candling the eggs with our Model 3300 Egg Candler is fun and allows you to see the embryonic development inside the egg. We recommend candling 3 times during the incubation process – Day 7 or 10, Day 14, and Day 18. If you don't see anything at Day 7 or 10, don't discard those eggs immediately. Check again at Day 14. By then, with lighter eggs, you should be able to tell the difference. Throw out any eggs that are not developing.*
13. **It's day 21 and my chicks haven't hatched yet – why?** *If your eggs haven't hatched by Day 21, don't give up! It's possible that your eggs were incubated at a temperature that was slightly low. Wait until day 23 at the least, and candle before discarding any eggs that haven't hatched just to make sure.*
14. **The Chicks are hatching – what do I do now?** *Congratulations! Leave them in the incubator to dry off. Their peeping and noise will help encourage other chicks to hatch. It can take several hours to dry off and you don't want them to get chilled. Once they are dry, you can transfer them to a pre-warmed brooder such as our Model 3700 Baby Chick Starter Home. Make sure it's equipped with brooder lamp, pine shavings, food, and water.*
15. **I didn't get any chicks to hatch, only a few hatched, or there were problems. Why?** *Here is a quick troubleshooting guide to the most common problems:*
 - a. **Early Hatching** – Temperature too high or eggs too warm before setting. Make sure temperature inside incubator averages 99.5 during the process and eggs are stored at temps between 40 - 60° F for no more than 7 days before setting.
 - b. **Late Hatching** – Temperature too low.
 - c. **Fully Developed, pipped, died** – Humidity too low, poor ventilation, eggs set upside down (large end should be up)
 - d. **Fully Developed, no pip, died** – Humidity too high (drowned), poor ventilation, eggs did not rest large end up before setting.
 - e. **Open Navels, bleeding** – Temperatures too high
 - f. **Staggered Hatch** – Hot and cool spots in the Incubator – more common with Still Air Incubator.
 - g. **Chicks stuck to shells** – Temperature too high, humidity too low, incubator opened too often, incubator located in a drafty area
 - h. **Crippled chicks** – Temperatures too high, humidity, too low, eggs set upside down
 - i. **Weak or small chicks** – Temperatures too high, humidity too low, poor ventilation
 - j. **Develop substantially, but died early** – Eggs not turned properly, improper incubation temperatures, poor ventilation, some diseases, power failure
 - k. **Developed a few days, but died** – Shipping problems (eggs got too hot or too cold during shipping), bacterial infection resulting from cracks during shipping, dirty incubator, dirty hands, incubation temperature spike or drop, power failure.
 - l. **No development** – Shipping problems (eggs “scrambled” during rough shipping, too hot, too cold), eggs not fertile, eggs not set properly after resting.

For more information on hatching and incubation, please consult library, books, or internet. A good source is www.backyardchickens.com