



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 in the incubator.*
- 2. At what temperature should the Incubator be run?** *Your incubator comes factory set at 100°F as measured on the digital display on top of the unit. Also included is a glass probe thermometer which is used to verify factory preset temperature. This probe thermometer may need to be **calibrated** with another thermometer you know to be accurate (such as a meat thermometer) before operating the unit, as it may have shifted 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 window, 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 12 hours to assure the temperature holds constant at 100°F as well as the humidity holding at 50-60%.*
- 5. How do I set the eggs?** *If using automatic egg turner, place your eggs with the small end facing down. If turning by hand, mark an “x” on one side and an “o” on the other and turn them at least 3 times per day. 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.*
- 6. What are the different wires hanging down on the inside of the digital incubators?** *The group of 4 red wires with a blue plastic chip at the end is where the digital humidity readout comes from. The single black wire with a clear plastic card stapled to the end is your temperature probe and this is where the digital temperature readout comes from. Do not allow either the temperature sensor or the humidity sensor to come into contact with the eggs, the egg turner, the metal screen, or the motor as this may affect the temperature and humidity readouts. If necessary use a small piece of scotch tape to fasten the wires so they hover just above the incubating eggs.*
- 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 and black temperature probe. You must continue to monitor the temperature throughout the incubation process and adjust the temperature setting accordingly. Since no two environments are the same, it will often be a process of trial and error to dial in the settings for you. Be sure to check the connection of the black temperature probe as this may have loosened in shipping. New temperature probe and humidity sensor can be provided upon request. 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. There is a square channel and two rectangular shaped channels that run horizontally as you look down on your incubator. Pour the water directly into these channels (using a turkey baster or cooking syringe to aim water) and do not pour water in the center or outside parts as there are ventilation holes in the Styrofoam and water may leak out of the bottom.*
- 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 65-75% during the last 3 days. Start by adding about ¼ - ½ cup of distilled warm water to the water channels and then just monitor the percent humidity level on the digital readout. In extremely dry environments you may struggle to keep enough humidity in the unit, so use a wet sponge or insert a small*

cup of water for additional moisture. Be advised to not over saturate the unit as too much water may affect the inside circuitry and may void warranty.

10. **How do I change the temperature setting and days to hatch countdown?** To change the 100F preset temperature, push and hold the red **MODE** button for 3-5 seconds (the temperature will begin will flash on and off). Release the **MODE** button and use the **UP** or **DOWN** buttons to adjust temperature as needed. When satisfied, simply press the **MODE** button again and the Days to Hatch number will begin to flash on and off. You may adjust this number as needed and when satisfied, press the **MODE** button again to lock the new temperature and Days to Hatch number in place.
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 65-75% and try to refrain from opening the lid these last 3 days.
12. **Why is the Model 3200 Automatic Egg Turner motor hot and making noise?** This is normal with the egg turner motors. The motor is in an enclosed space and there is not much air for the motor to consume. Also, the motor is a gear reduction motor meaning the gears are moving quickly but translating to rotating the eggs very slowly which causes a lot of heat to radiate from the motor. The egg turner tilts the eggs and makes a complete cycle once every 3-4 hours.
13. **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 non-developing eggs.
14. **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.
15. **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.
16. **I didn't get any chicks to hatch, only a few hatched, or there were problems. Why?**
 - 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
 - d. **Fully Developed, no pip, died** – Humidity too high (drowned), poor ventilation, eggs did not rest large end up before setting.
 - e. **Staggered Hatch** – Hot and cool spots in the Incubator – more common with Still Air Incubator.
 - f. **Chicks stuck to shells** – Temperature too high, humidity too low, incubator opened too often, incubator located in a drafty area
 - g. **Crippled chicks** – Temperatures too high, humidity, too low, eggs set upside down
 - h. **Develop substantially, but died early** – Eggs not turned properly, improper incubation temperatures, poor ventilation, some diseases, power failure
 - i. **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.

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

For more helpful information log onto our website at www.farminnovators.com or toll free: 800-277-8401.

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