

Delta Incubators



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Blue Diamond Dual Voltage Automatic Egg Incubator

Manual

Kindly read these instructions before use!



Read the instructions before use!



Do not cover!

This appliance is only to be used with the power supply unit provided with the appliance.

Damaged appliances must not be used.

The appliance, its power supply unit and its supply cord must be placed in an indoor area not subject to splashes of water or wet conditions and protected from or out of reach of animals.

Repairs must be carried out only by a suitably qualified person.

This appliance must not be used, cleaned, or maintained by children or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge without supervision.

Children must not play with the appliance. Disconnect the incubator from the mains power supply during cleaning.

Ensure that all electrical parts are kept dry.

Please read these instructions carefully before setting up your incubator to achieve best results and keep these instructions safe for future reference.

This document includes recommended procedures for successful hatching, but incubation involves the control and manipulation of many factors and in certain circumstances different procedures may be necessary.

For more detailed information on all aspects of egg incubation including helpful advice on getting best results please visit our website at www.deltaincubators.co.za

Your incubator is designed to allow the user to vary the incubation conditions to suit a wide range of species in different ambient conditions and the specific setup for every situation is beyond the scope of these instructions.

For more information on incubation and hatching please download a FREE Incubation Handbook: www.brinsea.co.uk/incubationhandbook, for more species-specific advice a range of publications can be found at: www.brinsea.co.uk/books.

Index

Setting Up Your Incubator	4
Settings: Control Menu	7
Understanding Humidity	12
Egg Storage	14
Egg Setting	14
Hatching	15
Cleaning	15
Quick Start Guide	16
Frequently Asked Questions	17
Specifications	20

Setting Up your Incubator

Unpacking and Part Quantities

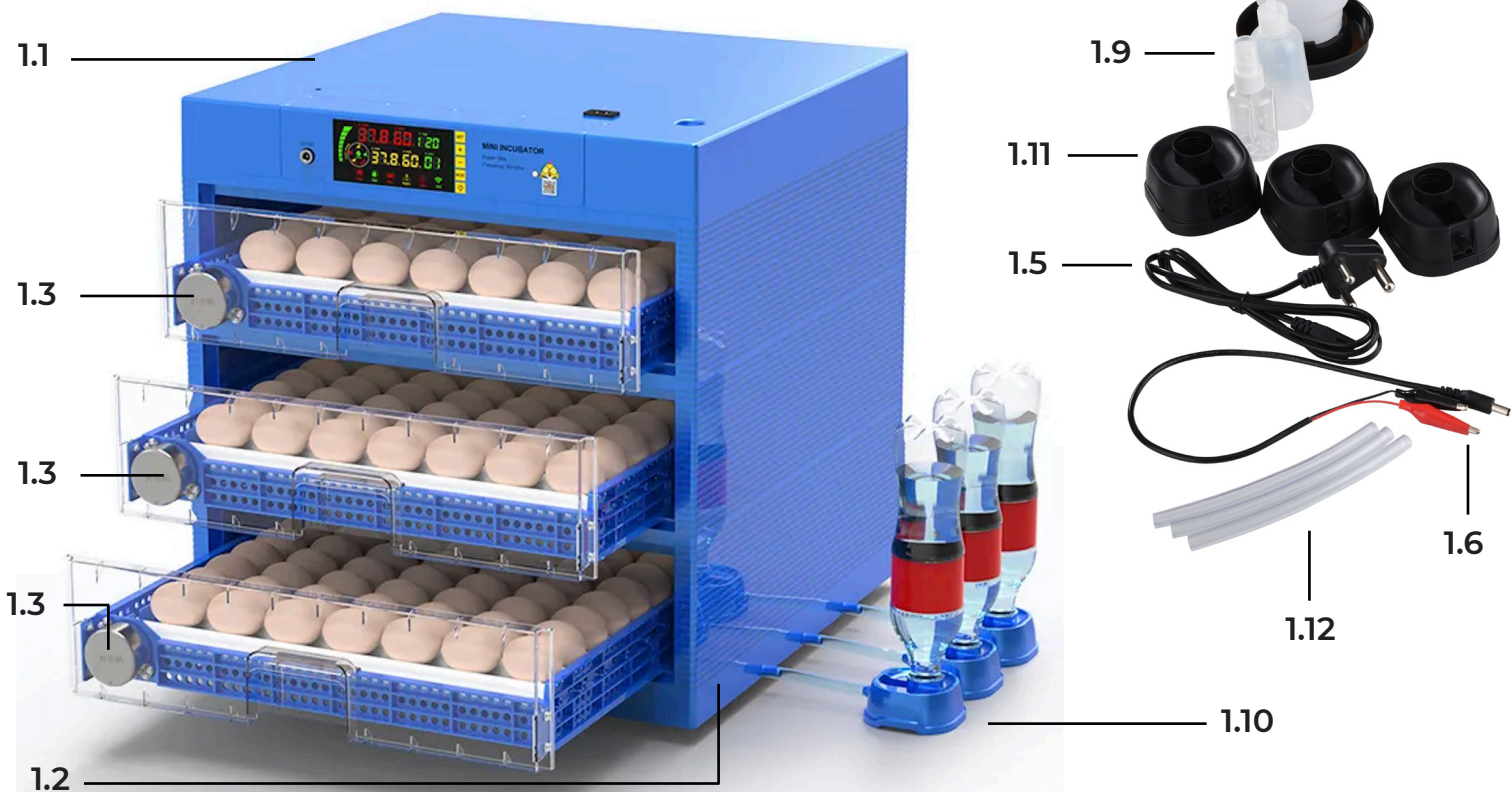
Your incubator has been supplied in protective packaging. Please remove all tape, strapping and packing from the incubator and parts. Retain the carton and packing materials to enable the unit to be repacked.

Check that your electrical supply matches that marked on the power supply unit.

The diagram shows all the parts that have been supplied to you. Ensure you have the correct quantities of each part. If there are any parts damaged or missing please contact your retailer or Delta Incubators (contact details end of the document). Damaged appliances must not be used.

What is inside the box:

- 1.1 Egg Incubator Lid
- 1.2 Egg Incubator Base
- 1.3 Expansion Level (Dependent on model/capacity)
- 1.4 Incubator Polystyrene cover (DO NOT THROW AWAY) (Not Pictured)
- 1.5 230V AC Power Supply Cord
- 1.6 12V DC Power Supply Cord
- 1.7 Small Drinker
- 1.8 Small Feeder
- 1.9 Misting Spray Bottle
- 1.10 Water Refill bottle not included, but pictured how to set up
- 1.11 Automatic Refill Stations x 3
- 1.12 Automatic Refill Stations tubes x3



Assembly

1. Begin by placing incubator base on a solid area.
2. Next, add the first expansion level, making sure it fits into the base.
3. Pull the turning motor cable through to connect to additional levels or the incubator lid.
4. Repeat the above steps as needed.
5. Lastly, add the incubator lid and connect to the turning motor cable.



Please visit our Youtube page for a video on how to assemble your incubator.

Our Channel name is:

@deltaincubators6849

We also have a video explaining the controller.

Location and Installation

Your incubator will give best results in a heated room free from wide temperature variations and with generous ventilation – particularly if several incubators are running at the same time.

Ensure that the room temperature cannot drop on a cold night.

Ideally thermostatically control the room at between 20 and 25°C. Never allow the room temperature to drop below 20°C.

Make sure that the incubator cannot be exposed to direct sunlight and is used on a flat, level surfaced worktop or table, not on the floor.

Connect the mains power cable to the power supply unit and connect the power supply unit cable to the incubator lid. Ensure each connector is pushed fully home in its socket.

Only use the power supply unit supplied with the product. Use of a different power supply may cause a hazard and will invalidate any guarantee.

The Dual voltage function allows you to run the machine of a 12V source. We recommend the following setup to assist during power failures.

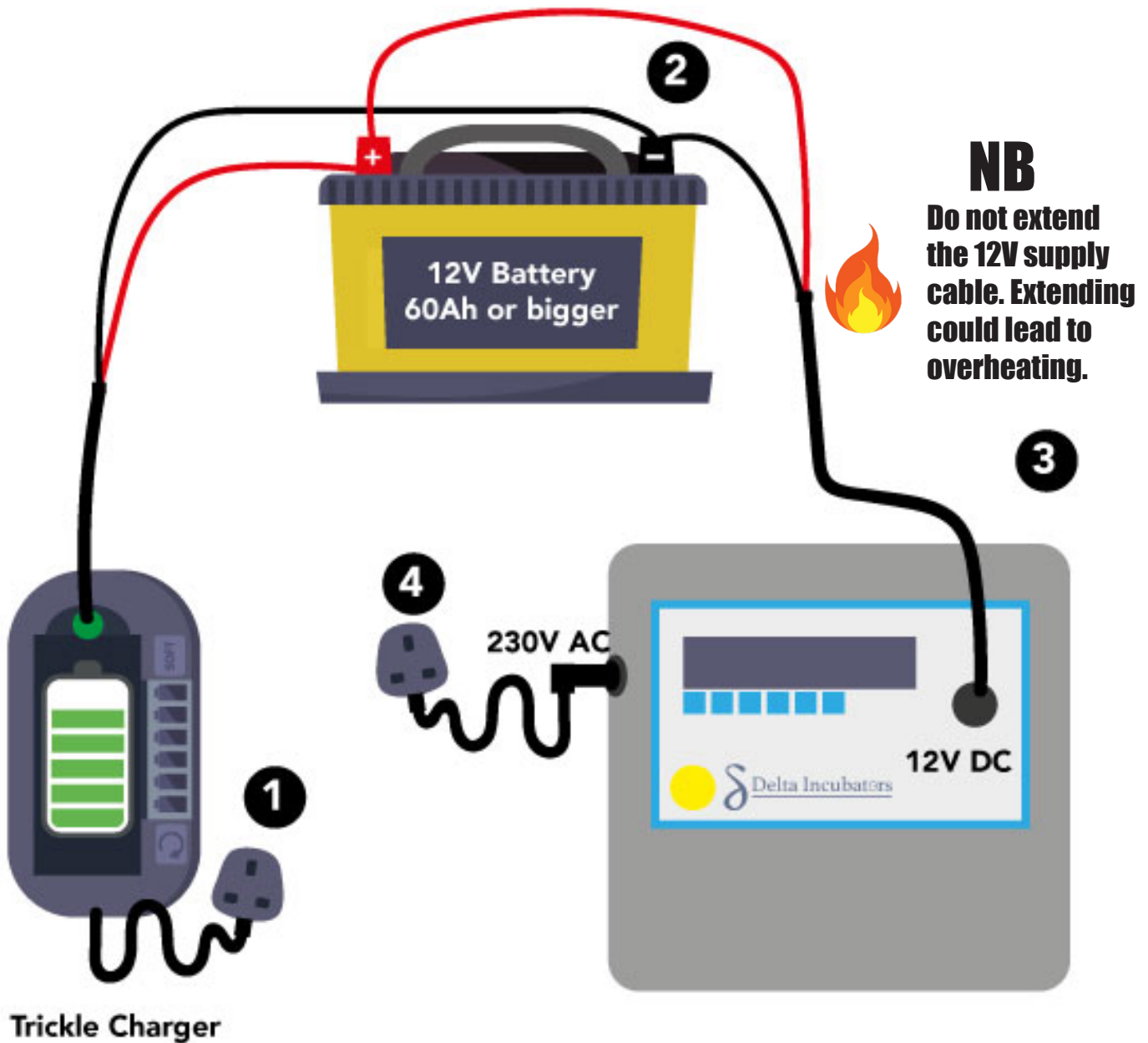
Battery and Trickle Charger Set-Up

Step 1: Connect Trickle Charger to Electricity

Step 2: Connect Trickle Charger to 12V Battery

Step 3: Connect Battery to Egg Incubator

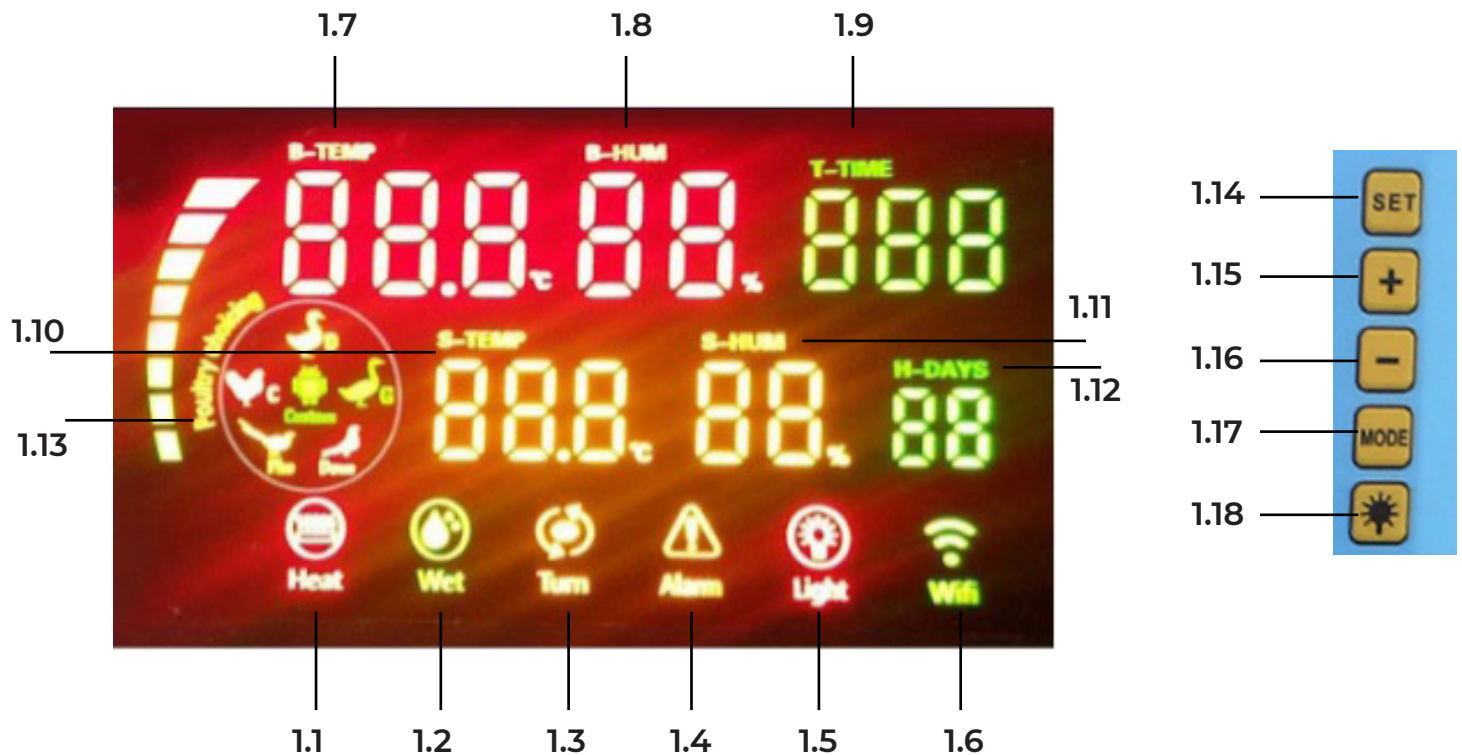
Step 4: Connect Egg Incubator to 230V Power Supply (Electricity)



Contact us on 0817997620 or www.deltaincubators.co.za

Settings: Control Menu

Display



Display Key

Indication Lights

- 1.1 Element engaged
- 1.2 Wet indication (n/a)
- 1.3 Turning motor engaged
- 1.4 Alarm
- 1.5 Egg candler
- 1.6 Wifi indication (Not Applicable!)

Display Windows

- 1.7 B-temp – actual temperature
- 1.8 B-hum – actual humidity
- 1.9 T-time – Time in minutes to next turning event
- 1.10 S-temp – temperature set point
- 1.11 S-hum – humidity set point (n/a)
- 1.12 H-days – hatching days
- 1.13 Mode selection

Buttons

- 1.14 SET
- 1.15 + (Increase)
- 1.16 - (Decrease)
- 1.17 Mode
- 1.18 Egg Candler

Under normal working conditions, press the “SET” button (Short Press) for user set the base temperature parameter. Press “+” and “-“ until the desired value is reached and press “SET” to save parameter. (User only needs to set the base parameters. All other parameters in different ranges will be adjusted accordingly and automatically).

No.	Parameter name	Parameter ID	Setting range	Default value
1	Base temperature	PP (P2)	0-99.9 °C	37.8 °C
2	Base humidity (N/A)	HH (H2)	0-99%	60%

Under normal working conditions, press button “SET” and “+” for 3 seconds, and user could set the temperature and humidity alarm and control parameters.

(ONLY FOR EXPERIENCED USERS)

No.	Parameter name	Parameter ID	Setting range	Default value
1	Temperature for alarm if over	P1	0-99.9 °C	38.6 °C
2	Temperature for starting fan if over	P2	0-99.9 °C	37.8 °C
3	Temperature for stopping main element	P3	0-99.9 °C	37.5 °C
4	Temperature for starting main element	P4	0-99.9 °C	37.0 °C
5	Humidity for alarm if over	H1	0-99%	80%
6	Humidity for stopping wet	H2	0-99%	60%
7	Humidity for starting wet	H3	0-99%	55%
8	Humidity for alarm if lower	H4	0-99%	40%

Under normal working conditions, press “Set” button for more than 3 seconds (long press) to enter egg turning and calibration parameter settings.

No.	Parameter name	Parameter ID	Setting range	Default value
1	Egg turning period	F1	0-999 minutes	120 minutes
2	Egg turning duration	F2	0-999 seconds	15 seconds
3	Temperature calibration	J1	Adjust according to the thermometer	
4	Humidity calibration	J2	Adjust according to the hygrometer	
5	Incubation days	F5	1-99 (days)	01
6	Egg turning times	F6	Can be displayed by query	
7	The heating fuzzy control pulse width (do not change!)	F7	0-10	5

Note: in the set state, when more than 10 seconds elapsed without pressing a button, the system will automatically exit the set state. Previously modified parameters are automatically saved.

Egg turning related functions.

Manual egg turning: Under normal working conditions, press the “+” button to manually start the egg turning operation.

Alarms:

When the alarm is activated, users can mute it by pressing the “-” button and switch back by pressing the button again. The alarm indication light will always on when in alarm state.

Sensor calibration:

The temperature and humidity sensors can deviate from true readings after extended use. Calibrate them with an accurate external thermometer/hygrometer. When F3 displayed, press “+” or “-” button to calibrate the temperature (Set to external reading). While when F4 displayed, press “+” or “-” button to calibrate the humidity (Set to external reading).

Incubation Day Counter

The default starting point for the incubation day counter is 01 from the moment the instrument is powered on. Every 24 hours that elapse, the number of days that have passed since incubation began will automatically increase by one.

The number of incubation days can be obtained by querying the system using the parameter ID F5. Users can modify the number by using the “+” and “-” buttons. The updated number will be saved even if the system shuts down.

The maximum allowable value for incubation days is 99. Once the number exceeds 99, it will restart from 01 again. Whenever a mode adjustment is initiated, the hatching day counter will be reset to 01.

Factory Reset

Under normal working conditions, press “+” and “-” buttons for 5 seconds (long press) until the machine beeps and shows 888 88. All the parameters are reset to the default values after a beep.

Sensor Error

In the event of a temperature sensor malfunction or unavailability, the temperature display window will show “EEE”. Additionally, the main heater, backup heater, and over temperature fan will cease operation.

Regardless of which sensor is not functioning properly, the alarm will sound.

Example: Changing temperature setpoint to 37.5

1. Under normal working conditions
2. Press ‘SET’
3. Display Shows 37.8 – PP
4. Press ‘-’ 3 times until you reach 37.5
5. Press ‘SET’ to save new setpoint.
6. Press ‘SET’ again (or wait 10 seconds) to return to home screen.

Mode Setting

Under normal working conditions, press “+” and “-” buttons for 5 seconds (long press) To customize the mode for chicken, duck, goose, pheasant, and dove, press and hold the “Mode” button for at least 3 seconds under normal operating conditions. When entering each adjustment mode, the number of turns will be reset to zero and the number of incubation days will be reset to 01.

The temperature and humidity can be adjusted based on the operating parameters of the system when mode selection is “custom”. However, the other five modes for chicken, duck, goose, pheasant, and dove are fixed according to the system’s predetermined parameters based on the number of hatching days.

In the fixed mode for chicken, duck, goose, pheasant, and dove, the system does not automatically reset the incubation period. However, by pressing and holding the “MODE” and “DOWN” buttons for at least 3 seconds, a buzzer sound will indicate the start of a new incubation period.

The operating parameters for the five different modes are listed in the table below:

Incubation time and parameter table for **chicken mode**:

Days of incubation	1 - 6 days	7 - 12 days	13 - 18 days	19 days and after
Temperature parameter	38.0 °C	37.8 °C	37.6 °C	37.2 °C
Humidity parameter	60% RH	55% RH	60% RH	70% RH
Egg turning parameter	2.0 (15)	2.0 (15)	2.0 (15)	No Turning

Incubation time and parameter table for duck mode:

Days of incubation	1 day	2 - 3 days	4 - 20 days	21 - 25 days	26 days and after
Temperature parameter	38.3 °C	38.0 °C	37.8 °C	37.5 °C	37.2 °C
Humidity parameter	60% RH	60% RH	55% RH	65% RH	70% RH
Egg turning parameter	2.0 (15)	2.0 (15)	2.0 (15)	2.0 (15)	No Turning

Incubation time and parameter table for goose mode:

Days of incubation	1 day	2 days	3 days	4 - 21 days	22 - 28 days	29 days and after
Temperature parameter	38.5 °C	38.3 °C	38.0 °C	37.8 °C	37.5 °C	37.0 °C
Humidity parameter	65% RH	65% RH	65% RH	55% RH	60% RH	75% RH
Egg turning parameter	2.0 (15)	2.0 (15)	2.0 (15)	2.0 (15)	2.0 (15)	No Turning

Incubation time and parameter table for dove mode:

Days of incubation	1 - 2 days	3 - 5 days	6 - 9 days	10 - 11 days	12 - 15 days	16 days and after
Temperature parameter	38.2 °C	38.0 °C	37.8 °C	37.5 °C	37.2 °C	37.0 °C
Humidity parameter	50% RH	50% RH	60% RH	60% RH	65% RH	70% RH
Egg turning parameter	2.0 (15)	2.0 (15)	2.0 (15)	2.0 (15)	2.0 (15)	No Turning

Incubation time and parameter table for pheasant mode:

Days of incubation	1 - 7 days	8 - 14 days	15 - 21 days	22 days and after
Temperature parameter	38.2 °C	38.0 °C	37.8 °C	37.6 °C
Humidity parameter	60% RH	55% RH	60% RH	75% RH
Egg turning parameter	2.0 (15)	2.0 (15)	2.0 (15)	No Turning

Understanding Humidity

Short term variations in humidity are not important. The average humidity over the incubation period needs to be near optimum to achieve the ideal weight loss. High humidity for the day or two of hatching is also important. Beware of chronic, excessive humidity.

Typical Humidity:

Generally accepted incubation RH levels for species groups:

- During incubation: Poultry 40-65% RH
- Waterfowl 45-55% RH
- Parrots 35-45%
- RH Hatching: All species 65% RH or more

Typical Weight Loss:

Typical ideal weight losses for species groups:

- Poultry 13%
- Waterfowl 14%
- Parrots 16%

Two factors affect incubation humidity: water evaporation within the cabinet (from eggs as well as from additional water) and levels of ventilation. The water content of the air being drawn through the incubator will also have an effect.

In smaller incubators, maintaining a constant humidity of 55% can be challenging, but it's not necessary. Instead, it's sufficient to maintain an average humidity level. This means that humidity can naturally fluctuate within the incubator without concern.

The humidity inside the incubator depends on the water surface area in contact with the air. The larger the surface area, the higher the humidity. To manage humidity, each Blue Roller incubator includes three water trays in the base, each connected to automatic water refill stations.

Start by filling one water tray and let the incubator run for at least an hour. If the humidity remains below 50%, fill another tray. Filling a second tray may increase humidity above 65%, which is acceptable. Simply wait for humidity to drop below 45% before refilling.

During the Lockdown phase, fill all trays to maintain humidity above 65%.

*Keep the machine in its polystyrene housing to seal air gaps around the drawers and maintain humidity.

*If all trays are filled and humidity remains low, the room's ambient humidity may be insufficient. Consider adding a humidifier to the room or additional water trays to increase humidity.

*Placing sponges in the water trays can also increase water surface area within the machine, aiding humidity levels.

2. Monitor egg weight loss:

(Which varies as a direct result of humidity) and correct them against published weight loss figures for the species. This is the most reliable method and is recommended – particularly where poor hatch rates are experienced or if eggs of high value are being incubated.

Eggs lose moisture through their shells and the rate of evaporation depends on the humidity levels around the eggs and the shell porosity. During incubation eggs need to lose a fixed amount of water which corresponds to a loss in weight of around 13-16% depending on species. By weighing eggs periodically during incubation it is possible to monitor and, if necessary, correct humidity levels to achieve the correct weight loss.

Hatching:

In all cases the humidity for hatching needs to be high. Because of the short duration involved water/weight loss will not be significantly affected. High humidity is necessary to prevent membranes drying and hardening before the hatch fully emerges. Humidity will naturally increase as the first eggs begin to hatch and internal membranes begin to dry. This effect is in addition to the increased area of water evaporation from the water pots. During hatching the high humidity levels will fall dramatically when the lid is opened and will take some time to build up. Resist the temptation to lift the lid frequently – mist whenever you open the incubator during hatching.

The bottom of the incubator doubles as a water tray. So, fill that up once the rollers are removed and you are ready to go into lockdown. Your humidity cannot be too high at this point.

** Condensation - It is normal for some condensation to occur on the cooler exposed parts of the clear top. This natural phenomenon is not a hazard or a problem for incubation but may indicate the room is cooler than optimum.*

Handle the Bottom Drawer with Care:

When chicks have already hatched and you need to pull out the bottom drawer, please exercise caution. Make sure no chicks have jumped out the back of the drawer. It's important to avoid unintentional harm to the chicks when closing the drawer. We value the safety and well-being of your precious chicks.

Keep your Incubator in its Polystyrene Housing:

We highly recommend keeping your incubator within its polystyrene housing. This insulation provides essential temperature and humidity stability and helps maintain a constant environment, ensuring the best conditions for your eggs.

Egg Storage

Ensure that you store eggs in cool, damp conditions. Most species may be safely stored for up to 14 days before serious reductions in hatch rates are likely. Daily turning of stored eggs also helps maintain hatchability.

Discard cracked, mis-shaped and heavily soiled eggs (if possible). Only wash soiled eggs using a branded egg wash solution such as Brinsea Incubation Disinfectant Concentrate following the manufacturer's instructions. It is essential to wash eggs in solution which is significantly warmer than the egg.

Bear in mind that all solutions will remove the outer cuticle from the egg as well as the dirt and may leave the egg at greater risk from bacterial contamination in the future.

Egg Setting

Before setting eggs ensure that the incubator has been running for several hours and has stabilised at the correct temperature.

The Blue Roller Egg Incubator is designed to accommodate eggs of different sizes. Quail, hen, large duck and goose eggs are accommodated in the rollers provided. Set the eggs in the pockets between the egg rollers.

Ensure the eggs are clean around their middle as large pieces of dirt may prevent them turning correctly. Plug in the turning motor and press + to test. Once the eggs have been set the temperature must not be adjusted for 24 hours to allow the eggs to warm. Check the humidity and temperature daily. Candle the eggs after 1/3rd of the incubation period has elapsed to reject clear, infertile eggs.

Hatching

If hatching in the Blue Roller Incubator, make sure eggs are candled one last time.

To turn your Blue Roller Incubator into a hatcher, place hatching grids on the turning trays three days before the hatch is due. Lay the eggs directly onto the grid. Fill all water trays. Hatching humidity levels need to be high (65% and above). The humidity cannot be too high at this stage.

When most eggs have hatched (12 to 48 hours after the first egg hatches) remove the hatchlings to a brooder. During hatching the high humidity levels will fall dramatically when the lid is lifted and will take some time to build up. Resist the temptation to open the incubator frequently and leave for at least 6 hours between inspections.

Cleaning

IMPORTANT: DISCONNECT THE INCUBATOR FROM THE MAINS POWER SUPPLY DURING CLEANING.

ENSURE THAT ALL ELECTRICAL PARTS ARE KEPT DRY. DO NOT IMMERSE THE INCUBATOR TOP.

DO NOT USE A DISHWASHER TO CLEAN ANY PARTS OF THE INCUBATOR.

Following each hatch in the Blue Roller Egg Incubator remove and wash the egg quadrants, and base in Brinsea Incubation Disinfectant Solution and then rinse thoroughly. Use a vacuum cleaner and soft brush to remove dust from the fan guard. Wipe all other internal surfaces with a cloth made damp with the solution and then wipe off with a cloth made damp with clean water.

Ensure that the instructions supplied with the fluid are followed. If a separate hatcher is used the procedure above should still be followed every two months.

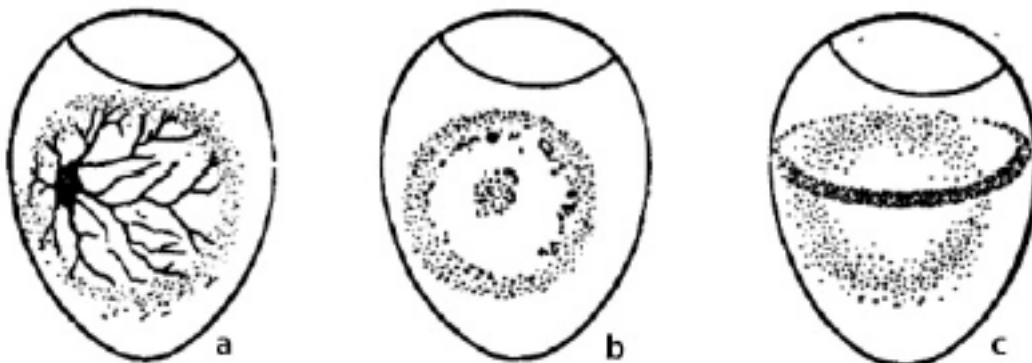
The exterior of the incubator may be cleaned with a damp cloth. Avoid allowing any moisture to get inside electrical housings. Periodically unscrew the four screws retaining the fan guard, remove the cover and soak. Dust and fluff may be removed from the fan and heater cord with a soft brush.

ALWAYS CLEAN THE INCUBATOR BEFORE STORAGE AND ENSURE THAT THE UNIT IS TOTALLY DRY INSIDE AND OUT. ALLOW IT TO RUN FOR 24 HOURS WITH NO WATER IN TO ENSURE IT IS THOROUGHLY DRY

Quick Start Guide

STEPS TO FOLLOW:

1. Begin by unboxing your incubator. The incubator should be placed in a well-ventilated room away from direct sunlight. The temperature in this room should be between 22 and 33 Degrees Celsius with no big temperature fluctuations.
2. Keep the incubator in the polystyrene housing to improve efficiency and minimize temperature fluctuations. Place the water trays underneath the grid, close the grid and fit the rollers. Fill one tray with water.
3. Assemble according to assembly instructions. Connect your incubator to the preferred power supply. Use either the 230V AC or 12V DC supply cable. You can safely connect both. Test the egg turner by pressing the Plus (+) button. The incubator is pre-set and ready to incubate. No need to change any parameters.
4. We recommend starting the incubator and monitoring the humidity for at least 24 hours before setting the eggs. Aim to maintain an average humidity of 45 - 65 % for the first 18 days. Add water to the trays if needed. **See Point 4 under FAQ (next page).**
5. Once the incubator is maintaining the set temperature and the humidity is stable you are ready to set the eggs.
6. Keep an eye on the humidity reading and fill the water trays when needed. Don't worry if the humidity shoots up above 70% after you add water. Just wait for it to drop below 50% before adding water again. This will ensure an average humidity of between 45% and 65%. The humidity alarm will go off as an indicator that the humidity is below 40%. To silence the alarm press minus (-) button.
7. Candle eggs on day 8 and get rid of infertile eggs. You can use the flashlight provided or the LED light on the lid of your incubator. For best results candle in a dark room. Remove infertile eggs. If you are unsure keep the egg in the incubator.



a) Fertilized egg

b) Infertile egg

c) Dead embryo

8. Maintain an average humidity level between 45% and 65%, up until day 18.
9. Candle eggs on day 18 again and get rid of infertile eggs. Infertile eggs will be easy to spot.
10. Remove the rollers from the baskets and lay the fertile eggs down on the grid.
11. Fill the water trays to increase the humidity above 65%. Humidity cannot be too high at this stage.
12. In case of very thick shells and/or in dry areas, it is recommended to spray the eggs with a very fine mist twice a day during this period. DO NOT open the incubator when the chicks start to hatch. We know you are curious, but the loss of humidity will cause the eggshells of the unhatched eggs to dry out and they won't be able to break through the shell.
13. It is not unheard of for chicks to hatch on day 22 or 23, so keep the incubator running. A chick can survive for up to 24 hours without any food or water, in the incubator after hatching.
14. Once you are certain that all the eggs have been hatched, remove the chicks from the incubator and place in a brooder. Wash the incubator thoroughly and do not store it if there is any water or moisture present. After washing your incubator you are ready for the next batch.

Visit our Youtube Channel (Delta Incubators) for a "How-To" video.

Frequently Asked Questions

Below are frequently asked questions about egg incubation.

For further questions, please refer to our website, Facebook page or contact us via WhatsApp on 081 799 7620.

1. How long does it take for an egg to hatch?

Answer: Chicken eggs take an average of 21 days to hatch. It is not unheard of for an egg to hatch on day 22 or 23, so keep your eggs in the incubator if they look developed. We recommend candling your eggs on day 8 and again on day 18 to ensure the embryo is alive and growing.

2. What is the recommended temperature for incubating chicken eggs?

Answer: We recommend 37.8°C. Our roller range comes pre-set at this temperature. You don't need to make any parameter adjustments. All you need to do is plug in the incubator. Although most of the parameters are adjustable we only recommend this for experienced users.

3. How do I set the temperature set point to something other than 37.8°C?

Answer: Press the 'SET' button to see the current set temperature flashing? Use the '+' and '-' arrows to increase or decrease the temperature. Press the 'SET' button again to save your new set point.

4. What is the Humidity and how to I control it?

Answer:

In smaller incubators, maintaining a constant humidity of 55% can be challenging, but it's not necessary. Instead, it's sufficient to maintain an average humidity level. This means that humidity can naturally fluctuate within the incubator without concern.

The humidity inside the incubator depends on the water surface area in contact with the air. The larger the surface area, the higher the humidity. To manage humidity, each Blue Roller incubator includes three water trays in the base, each connected to automatic water refill stations.

Start by filling one water tray and let the incubator run for at least an hour. If the humidity remains below 50%, fill another tray. Filling a second tray may increase humidity above 65%, which is acceptable. Simply wait for humidity to drop below 45% before refilling.

During the Lockdown phase, fill all trays to maintain humidity above 65%.

*Keep the machine in its polystyrene housing to seal air gaps around the drawers and maintain humidity.

*If all trays are filled and humidity remains low, the room's ambient humidity may be insufficient. Consider adding a humidifier to the room or additional water trays to increase humidity.

*Placing sponges in the water trays can also increase water surface area within the machine, aiding humidity levels.

5. Help. The humidity is too high, what do I do?

Answer: Don't worry, this is not a problem. You can remove some water if possible. If not, let the machine run. The water will evaporate and the humidity will decrease as soon as it does. Do not add any more water again until the humidity is below 45%. This time add less. Follow the instructions in Question 4. A couple of days above 70% won't be detrimental to your eggs or hatch rate.

6. How do I know that the egg turning is working? Do I need to turn the eggs myself?

Answer: No. This is an automatic turning Incubator. The rollers turn every 2 hours, for about 15 seconds at a time. Test the rollers by pressing the '+' button. This will engage the rollers.

You can mark your egg with an "X" on one side to check that it does turn. The eggs need to lay flat on its side on the rollers. Unlike the tilting machines where it is required to set the egg with its pointy end down.

7. The temperature in my incubator is not constant. Why?

Answer: Your incubator may be cold. We recommend a room temperature not lower than 22°C for successful incubation. Make sure that there are no draughts or sudden temperature changes in the room temperature. Direct sunlight on your incubator will also cause problems. Factory reset your Incubator to make sure somebody did not fiddle with the parameters your incubator should be in the polystyrene housing supplied. This will insulate the incubator and help maintain a constant temperature. In case of extreme cold you can look at trying to insulate the incubator even more. This can be done by a blanket or comforter.

If problem the problem persists, please contact us.

*Please note that temperature variations of 0.3degrees above and below setpoint is normal.

8. How do I reset the machine?

Answer: Ensure your incubator is connected to a power source and running. Next, press and hold the '+' and '-' buttons simultaneously for about 5 seconds. The controller will flash 888 88. Your machine is now reset.

9. What batteries / solar system should I use?

Answer: We recommend the following solar setup to run, based on a 240 Blue Diamond egg incubator.

Incubator Load: 120W – 12V DC Daily runtime (Estimate) – 20 Hours

Daily load (kW): 2.4kW

Battery recommendations: Solar recommendations: 4 x 105Ah batteries 6 x 100W Solar panels

*This selection is based on assumed variables. We are not solar specialists and cannot be held responsible for any system design shortcomings. Consult a solar expert in your area for an accurate selection.

10. What is Continuous Incubation? Can I add eggs every few days?

Answer: Continuous incubation presents an innovative approach to enhancing your incubator's productivity, allowing for weekly chick hatching instead of the typical three-week intervals.

While most mini incubators are optimized for batch incubation, wherein a set quantity of eggs undergo incubation and hatching within a 21-day period, continuous incubation introduces a different rhythm.

In continuous incubation, eggs are loaded into the machine every seven days, facilitating weekly hatches. Each week, one-third of the setting space is filled with eggs, which are subsequently transferred to the hatching area upon reaching the 18-day mark. The eggs remain in the hatcher for the standard three-day period until they hatch. This cycle repeats weekly to ensure a consistent output of chicks.

Have a look on our website under the FAQ tab, to read up on Continuous Incubation. View our website for hatchers or combo deals.

11. Loadshedding strikes. What if the power goes out?

Answer: Power failures of 2 hours a day will have little to no effect on your hatch. Don't be alarmed if the power goes out. Keep in mind that a hen leaves her nest during the course of the day, so a few hours won't ruin the eggs.

Should you have power outages of more than 3 - 4 hours, we recommend connecting your machine to an alternative power supply (such as a 12v battery). If you don't have that option keep the incubator closed and cover with a blanket or other insulating material. Continued power outages during the hatching period might cause your hatch to be late. So keep your Incubator running past the normal 21 days.

12. What do I do after the chicks hatched?

Answer: It is not unheard of for chicks to hatch on day 22 or 23, so keep the incubator running. A chick can survive for up to 24 hours without any food or water, in the incubator after hatching. Once they your chicks are "fluffy", take them out of the incubator and place them in a brooder. Cover the floor with wood shavings (we recommend this as the shavings absorb the urine and poop and minimizes daily cleaning). Alternatively, you can also add newspaper. Ensure they have enough water, food and a heat source.

Food for the first days is called "starter feed". Make sure there is always clean water available. Chicks are notorious for drowning themselves. Make sure you put small pebbles or similar in the water tray to prevent this. A heat source, specifically during cold nights and winter months is important. Look at infra-red lamp or a standard 60W bulb

Ensure your brooder is always clean. Chicks are very susceptible to any kind of bacteria or disease left behind by a previous hatch. Take time to clean your equipment with warm, soapy water, and dry it thoroughly before you store it.

13. With what can I clean my Incubator/ Brooder

Answer: We recommend you use Virukill. It is around R85 for 250ml, available at most Vets and Petshops. This is a broad spectrum disinfection of surfaces against all poultry virus, bacteria, fungi, mycoplasma, yeast and algae.

We hope you found this information helpful. May you start incubating with confidence and we wish your business/hobby success as well as many healthy hatches.

Please have a look on our website www.deltaincubators.co.za under the "FAQ" tab - here you will find many interesting articles about the use of your machine.

Specifications

The Blue Diamond Range Capacities (Approximate and Dependent on Egg Size):

Incubator Size	Eggs per Level
120 Eggs	60
180 Eggs	60
240 Eggs	60
300 Eggs	100
400 Eggs	100

Typical power consumption (Watts): 100

Maximum power consumption (Watts): 250

Electrical Supply: 230V, 50Hz, 12V DC

Used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery, and recycling, please take this product to a designated collection point where it will be accepted free of charge. Please contact your local authority for further details of your nearest designated collection point. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.