Onsju hdq18-13

Onsju HDQ18-13 18-Egg Automatic Incubator User Manual

Model: HDQ18-13 | Brand: Onsju

1. Introduction

Thank you for choosing the Onsju HDQ18-13 18-Egg Automatic Incubator. This intelligent incubator is designed to provide an optimal environment for hatching various types of poultry eggs, including chicken, duck, goose, quail, and pigeon. It features automatic egg turning, precise temperature and humidity control, a built-in egg candler, and a dual power supply option for reliable operation.
Please read this manual thoroughly before operating the incubator to ensure proper setup and successful hatching.

2. Safety Instructions

- Always connect the incubator to a stable power source.
- Do not operate the incubator with wet hands.
- Keep the incubator away from children and pets.
- Ensure proper ventilation around the unit.
- Unplug the device before cleaning or maintenance.
- If using the battery cable, ensure correct polarity (red to positive, black to negative) to avoid damage to the machine or battery.

3. Package Contents

Verify that all items are present in your package:

- Incubator Host (Main Unit)
- Power Supply (AC Adapter)
- User Manual
- External Battery Cable (DC12V)
- Water Bottles (for humidity)
- Spray Pot

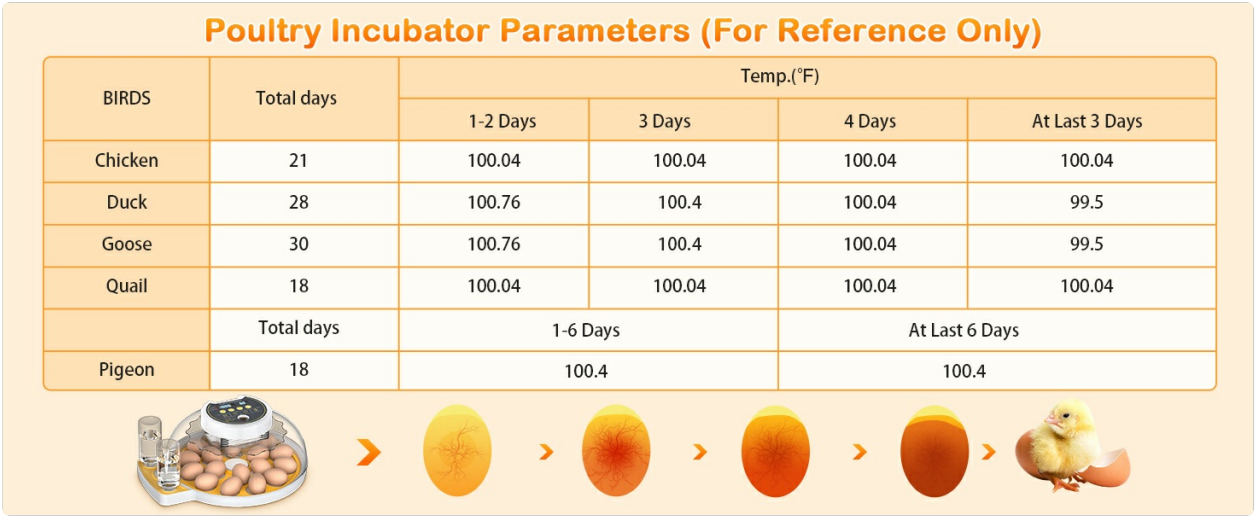

Figure 3.1: Included components of the Onsju 18-Egg Incubator.

4. Product Overview

The Onsju HDQ18-13 incubator features a clear dome for 360-degree observation and an intuitive control panel for easy operation.

4.1. Machine Breakdown Diagram

Figure 4.1: Exploded view of the incubator components.

4.2. Control Panel

The control panel provides real-time temperature and humidity readings, along with buttons for settings and functions.

Figure 4.2: Detailed view of the control panel with temperature, humidity, and function buttons.

- **Fahrenheit Display:** Shows current temperature.
- **Humidity Display:** Shows current humidity percentage.
- **WORK Indicator:** Lights up when heating.
- **EGG TURNING Indicator:** Lights up when eggs are turning.
- **SET Button:** Press once to enter setting mode.
- **'+' / '-' Buttons:** Adjust values in setting mode.
- **Egg Turning Test Run Button:** Initiates a manual egg turning cycle.
- **Cancel Alarm Button:** Silences temperature/humidity alarms.
- **Enter Candling Lamp Button:** Activates the built-in egg candler.

5. Setup

Follow these steps for initial setup of your incubator:

1. **Unpack and Inspect:** Carefully remove all components from the packaging and inspect for any damage.
2. **Assemble Water Bottles:** Fill the provided water bottles with distilled water. Attach the special caps to

the bottles, ensuring a secure fit.

3. **Place Water Bottles:** Insert the filled water bottles into their designated slots on the incubator base. The caps will release water into the humidity channels as needed.
4. **Install Egg Tray:** Place the egg turning gear tray onto the incubator base. Ensure it is properly aligned with the motor mechanism.
5. **Place Eggs:** Carefully place up to 18 fertilized eggs into the egg slots on the tray.
6. **Attach Top Cover:** Securely place the transparent top cover onto the base.
7. **Connect Power:** Connect the AC power adapter to the incubator and then to a power outlet. Alternatively, for backup or off-grid use, connect the external battery cable to a 12V battery (not included) and then to the incubator.

Figure 5.1: Incubator with water bottles and eggs in place.

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Video 5.1: Overview of the Onsju 18-Egg Incubator setup and features, including water filling and egg placement.

6. Operating Instructions

6.1. Initial Power-On and Preheating

Upon connecting power, the incubator will display the current temperature and humidity. Allow the incubator to preheat for at least 2-3 hours to stabilize the internal temperature and humidity before placing eggs.

6.2. Temperature and Humidity Settings

The factory preset temperature is 100°F (37.8°C) and humidity is 60%. These settings are generally suitable for chicken eggs. For other types of eggs or specific requirements, you may need to adjust these values.

- **To Adjust Temperature/Humidity:** Press the 'SET' button once to enter setting mode. Use the '+' and '-' buttons to adjust the desired temperature or humidity. Press 'SET' again to confirm and save.
- **Smart Alarm System:** The incubator features a smart alarm system that alerts you to significant fluctuations in temperature or humidity. For example, an alarm may sound if temperature drops below 98.6°F or rises above 101.5°F, or if humidity falls below 40% or exceeds 80%. Press the 'Cancel Alarm' button to silence the alarm.

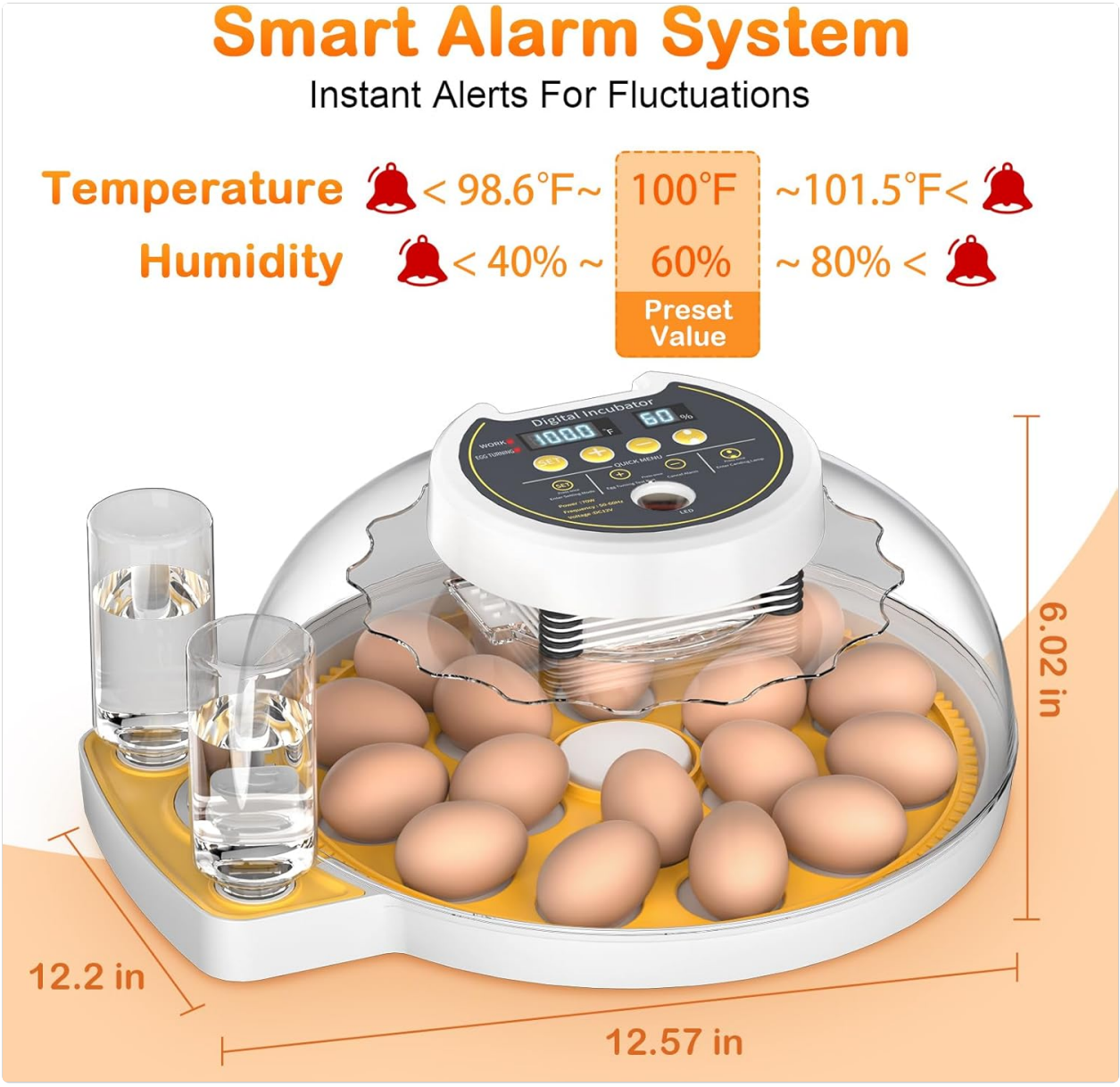

Figure 6.1: Smart Alarm System and general dimensions of the incubator.

6.3. Automatic Egg Turning

The incubator automatically turns eggs every 120 minutes to ensure even heat distribution and proper embryo development. This mimics natural incubation conditions.

- **Egg Turning Test Run:** Press the 'Egg Turning Test Run' button to initiate a manual turning cycle and verify the mechanism is working correctly.
- **Stopping Egg Turning:** In the last 3 days of the hatching period, remove the egg turning gear tray to prevent further turning. This allows chicks to position themselves for hatching.

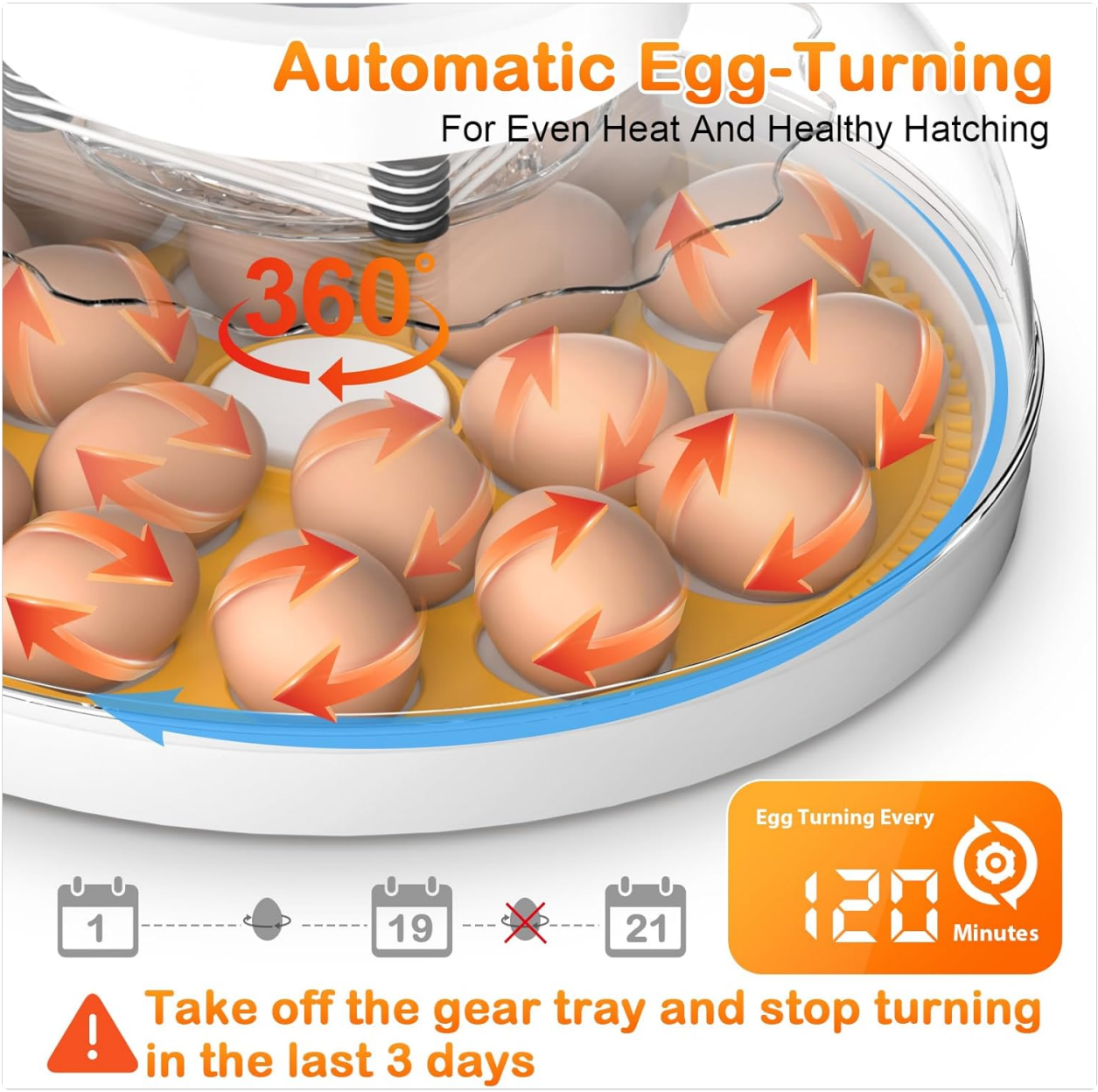

Figure 6.2: Automatic egg turning mechanism and recommended turning schedule.

6.4. Egg Candling

The built-in LED egg candler allows you to monitor the development of the embryo without disturbing the incubation process. Press the 'Enter Candling Lamp' button to activate the light.

Figure 6.3: Using the built-in egg candler to observe embryo development.

6.5. Ventilation

Adjust the air vent on the top cover to control airflow. In the early hatching period, keep the vent mostly closed. In the last few days, open the vent fully to increase ventilation.

Figure 6.4: Air vent and fan-assisted induced airflow system.

6.6. Incubation Parameters for Various Poultry

The following table provides general guidelines for temperature and humidity for different types of eggs. These are reference values and may need slight adjustments based on environmental conditions and specific egg characteristics.

Bird	Total Days	Temperature (°F)				Humidity (%)
		1-2 Days	3 Days	4 Days	At Last 3 Days	
Chicken	21	100.04	100.04	100.04	100.04	50-60
Duck	28	100.76	100.4	100.04	99.5	60-70
Goose	30	100.76	100.4	100.04	99.5	60-70
Quail	18	100.04	100.04	100.04	100.04	50-60
Pigeon	18	100.4 (1-6 Days)			100.4 (At Last 6 Days)	50-60

Table 6.1: Recommended incubation parameters for various poultry.

7. Maintenance

Regular cleaning and maintenance will prolong the life of your incubator and ensure optimal hatching results.

- **Cleaning:** After each hatch, unplug the incubator and disassemble the top cover and egg tray. Wash these parts with mild soap and warm water. Ensure all parts are completely dry before reassembly or storage.
- **Water Channels:** Periodically clean the water channels in the base to prevent algae or mineral buildup.
- **Storage:** Store the incubator in a clean, dry place when not in use.

8. Troubleshooting

If you encounter issues with your incubator, refer to the common problems and solutions below:

Problem	Possible Cause	Solution
Temperature/Humidity fluctuations or incorrect readings	Lid not properly sealed; sensor malfunction; external environmental changes.	Ensure the lid is securely closed. Check the sensor for obstructions. Maintain a stable room temperature. If issues persist, contact customer support.
Egg turning mechanism not working	Motor disconnected; gear obstruction; power issue.	Check motor connection. Ensure no debris is blocking the gears. Verify power supply. Perform an 'Egg Turning Test Run'.
Incubator not heating up	Power supply issue; heating element malfunction.	Check power connections and ensure the power adapter is working. If using battery, ensure it's charged and connected correctly.
Power supply unit gets very hot	Overload; faulty power supply.	Unplug immediately. Ensure the incubator is not overloaded. If the power supply remains excessively hot, discontinue use and contact customer support for a replacement.

9. Specifications

- **Model:** HDQ18-13
- **Capacity:** 18 Chicken Eggs (varies for other egg sizes)
- **Dimensions (LxWxH):** 12 x 12 x 6 inches
- **Item Weight:** 4 Pounds
- **Material:** Polyethylene (PE)
- **Power:** 70W
- **Frequency:** 50-60Hz
- **Voltage:** DC12V (AC adapter included)
- **Special Feature:** Adjustable temperature/humidity, Automatic Egg Turning, Built-in Egg Candler, Dual Power Supply.

10. Warranty and Support

For warranty information, technical support, or replacement parts, please contact Onsju customer service through the retailer where you purchased the product. Keep your purchase receipt as proof of purchase.