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› Dancing Wings Hobby E4306 Mosquito Ultra-Micro Indoor RC Airplane Instruction Manual

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Model: E4306

1. INTRODUCTION

Thank you for purchasing the Dancing Wings Hobby E4306 Mosquito Ultra-Micro Indoor RC Airplane. This model is designed for indoor flight, offering a lightweight and agile experience. This manual provides essential information for the safe assembly, operation, and maintenance of your aircraft. Please read it thoroughly before use.



Image: The fully assembled E4306 Mosquito airplane, showcasing its lightweight carbon fiber film construction and vibrant wing design, alongside its compact remote control.

2. SAFETY INFORMATION

Operating remote control aircraft requires caution. Failure to follow safety guidelines can result in injury or damage to property. Always prioritize safety.

- **Indoor Use Only:** This aircraft is designed for ultra-micro indoor flight. Do not operate outdoors, especially in windy conditions.
- **Adult Supervision:** Recommended for adult users (manufacturer minimum age 192 months). Younger users should always be supervised by an adult.
- **Clear Area:** Ensure a clear, open indoor space free from obstacles, people, and pets before flying.
- **Battery Safety:** Use only the specified 1S 120mAh LiPo battery. Follow all charging instructions. Do not overcharge, puncture, or expose batteries to extreme temperatures.
- **Propeller Warning:** The propeller can cause injury. Keep fingers, hair, and loose clothing away from the propeller when the aircraft is powered on.
- **Pre-Flight Check:** Always perform a pre-flight check to ensure all components are securely attached and functioning correctly.
- **Power Off:** Always power off the aircraft and transmitter when not in use. Disconnect the battery after each flight.

3. PACKAGE CONTENTS

Verify that all components listed below are present in your package. If any parts are missing or damaged, please contact your retailer or Dancing Wings Hobby support.



Image: An overhead view of all components included in the E4306 package, including the main wing, tail sections, fuselage frame, motor, propeller, landing gear, battery, and remote control.

- E43 Mosquito PNP (Plug-N-Play) Aircraft Components
- Mini Receiver (E-FHSS protocol)
- 1S 120mAh LiPo Battery
- 3 x Propellers (4-inch)
- Transmitter (Remote Control)
- USB Charging Cable
- Small Screwdriver
- Landing Gear Set
- Instruction Manual (this document)

4. SETUP & ASSEMBLY

The E4306 Mosquito is a PNP (Plug-N-Play) version, meaning it requires some final assembly. Follow these steps carefully.

4.1. Aircraft Assembly

1. **Attach Landing Gear:** Carefully attach the landing gear to the designated slots on the fuselage. Ensure they are secure.
2. **Install Tail Section:** Connect the horizontal and vertical stabilizers to the rear of the fuselage. Pay attention to orientation for proper flight control.
3. **Connect Wing:** Secure the main wing to the fuselage. Ensure all control linkages (if any) are properly connected to the servos.
4. **Propeller Installation:** Attach one of the 4-inch propellers to the motor shaft. Ensure it is facing the correct direction for thrust. (Spare propellers are included).
5. **Receiver and Battery Placement:** Position the mini E-FHSS receiver and the 1S 120mAh LiPo battery in their designated compartments, ensuring they are secure and do not interfere with control surfaces.



Image: A view of the E4306 Mosquito during assembly, highlighting the connection points for the main wing and tail section to the lightweight fuselage frame.

4.2. Battery Charging

Use the provided USB charging cable to charge the 1S 120mAh LiPo battery. Connect the cable to a standard USB power source (e.g., computer USB port, USB wall adapter). The charging indicator will show the charging status (refer to charger instructions for specific light patterns). Do not leave batteries unattended while charging.

4.3. Transmitter Setup and Binding

The E4306 package includes a transmitter compatible with the E-FHSS protocol. Ensure batteries are installed in the transmitter.

1. **Power On Transmitter:** Turn on the transmitter first.
2. **Connect Aircraft Battery:** Connect the fully charged 1S 120mAh LiPo battery to the aircraft's receiver/ESC.
3. **Binding Process:** The aircraft and transmitter should automatically bind. If not, refer to the specific binding instructions for your E-FHSS receiver, usually involving pressing a bind button on the receiver while powering on the aircraft.
4. **Test Controls:** After successful binding, gently test all control surfaces (ailerons, elevator, rudder) and motor throttle response to ensure they move correctly in response to transmitter inputs.

5. OPERATING INSTRUCTIONS

Always ensure a safe, clear indoor flying environment before operating your E4306 Mosquito.

5.1. Pre-Flight Checks

- Verify both aircraft and transmitter batteries are fully charged.
- Confirm all control surfaces move freely and correctly with transmitter input.
- Check propeller for damage and ensure it is securely attached.
- Ensure no loose wires or components on the aircraft.
- Confirm a clear flight path, free of people, pets, and obstacles.

5.2. Take-Off

Place the aircraft on a smooth, flat surface. Slowly advance the throttle stick on the transmitter. The aircraft will gain speed and lift off. For hand launch, gently toss the aircraft forward with a slight upward angle while applying throttle.

5.3. Flight Controls

The E4306 Mosquito uses standard RC airplane controls:

- **Throttle:** Controls motor speed and altitude (usually left stick, vertical).
- **Aileron/Roll:** Controls banking left or right (usually right stick, horizontal).
- **Elevator/Pitch:** Controls nose up/down for ascent/descent (usually right stick, vertical).
- **Rudder/Yaw:** Controls turning left or right (usually left stick, horizontal).

Practice gentle inputs initially. The E4306 is designed for agile indoor flight, including 3D maneuvers, but start with basic flight to familiarize yourself with its response.



Image: The E4306 Mosquito airplane gracefully flying indoors, demonstrating its lightweight design and maneuverability.

5.4. Landing

Reduce throttle gradually to decrease altitude. Maintain control with elevator and ailerons to guide the aircraft to a gentle landing. Aim for a smooth, level surface. Once landed, cut the throttle completely and disconnect the battery.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your E4306 Mosquito.

- **Cleaning:** Gently wipe the aircraft with a soft, dry cloth after each flight to remove dust or debris. Avoid using harsh chemicals.
- **Propeller Inspection:** Regularly check the propeller for cracks, bends, or chips. Replace damaged propellers immediately using the provided spares. A damaged propeller can cause vibrations and reduce flight performance.
- **Battery Care:** Store LiPo batteries in a cool, dry place at a storage voltage (around 3.8V per cell) if not used for extended periods. Do not store fully charged or fully discharged.

- **Control Linkages:** Ensure all control linkages are free from obstruction and move smoothly. Check for any loose connections.
- **Motor/ESC:** Keep the motor free of debris. If you notice reduced power or unusual noises, inspect the motor and ESC connections.

7. TROUBLESHOOTING

Refer to this section for common issues and their solutions.

Problem	Possible Cause	Solution
Aircraft does not respond to transmitter.	<ul style="list-style-type: none"> • Aircraft not bound to transmitter. • Low battery in aircraft or transmitter. • Transmitter not powered on. 	<ul style="list-style-type: none"> • Perform binding procedure (Section 4.3). • Charge/replace batteries. • Ensure transmitter is powered on.
Aircraft flies erratically or drifts.	<ul style="list-style-type: none"> • Control surfaces not centered (trims). • Damaged propeller. • Strong air currents (even indoors). 	<ul style="list-style-type: none"> • Adjust trims on the transmitter. • Replace propeller. • Ensure a calm indoor environment.
Motor not spinning.	<ul style="list-style-type: none"> • Battery not connected or discharged. • Loose motor wire connection. • Throttle trim too low. 	<ul style="list-style-type: none"> • Connect/charge battery. • Check motor connections. • Increase throttle trim slightly.

8. SPECIFICATIONS

Key technical specifications for the Dancing Wings Hobby E4306 Mosquito RC Airplane.

E43 Carbon Airplane PNP		Mosquito (Indoor aircraft)	
 360mm 14.1inch	 350mm 13.7inch	 FLY	≈20g
 Brushed Motor	 Brushed ESC	 1.7g*2pcs	
 1S 120mAh	 4inch	 3CH	
 ASSEMBLY E <input type="checkbox"/> H	 FLYING E <input type="checkbox"/> H	 E-Power <input checked="" type="checkbox"/> G-Power	



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Image: A diagram illustrating the key specifications of the E4306 Mosquito, including wingspan, fuselage length, flying weight, motor type, ESC, battery, propeller size, and receiver channels.

- **Model:** E4306 Mosquito
- **Wingspan:** 360mm (14 inches)
- **Fuselage Length:** 350mm (14 inches)
- **Flying Weight:** Approximately 20g
- **Motor:** Brushed-614
- **ESC:** Brushed 1S/2A
- **Battery:** 1S 120mAh LiPo
- **Propeller:** 4 inch / 100mm (3 pieces included)
- **Receiver & Transmitter:** E-FHSS protocol, 3-channel
- **Material:** Carbon Fiber Film / Foam
- **Assembly Required:** Yes (PNP version)
- **Power Source:** Battery Powered
- **Recommended Age:** Adult (192 months minimum)

9. CUSTOMER SUPPORT

For technical assistance, missing parts, or warranty inquiries, please contact your retailer or the manufacturer, Dancing Wings Hobby. Please have your model number (E4306) and purchase information ready when contacting support.

You can often find contact information on the product packaging or the official Dancing Wings Hobby website: [Dancing Wings Hobby Store on Amazon](#)

