Dancing Wings Hobby S2501B

Dancing Wings Hobby EXTRA330 S2501B Balsa Electric RC Airplane Kit Instruction Manual

Model: S2501B

Product Overview

The Dancing Wings Hobby EXTRA330 S2501B is a laser-cut balsa wood kit designed for building an electric radio-controlled airplane. This kit requires assembly and is suitable for hobbyists who enjoy constructing their own model aircraft. The finished model features a 1025mm wingspan, providing stable flight characteristics.

- **Accurate Laser-Cut Parts:** Precision-cut components for straightforward assembly.
- **Premium Materials:** Constructed from high-quality balsa and plywood.
- **Functional Landing Gear:** Includes authentic, functional landing gear.
- **Molded Components:** Features a molded plastic cowl and windscreen.
- **Comprehensive Hardware:** Equipped with a complete hardware pack for assembly.
- **Stable Flight:** 1025mm wingspan contributes to good flight stability.
- **Skill Development:** Ideal for beginners to enhance building and flying skills.

Kit Contents

The S2501B kit includes the laser-cut balsa and plywood parts, a molded plastic cowl, windscreen, functional landing gear, and a comprehensive hardware pack. This specific variant also includes 2 meters of blue film and 2 meters of red film for covering the airframe.

Image: Detailed view of the kit contents, including laser-cut wood parts, plastic cowl, windscreen, and various hardware components.

Image: The S2501B kit packaging, showing the box and included rolls of blue and red covering film.

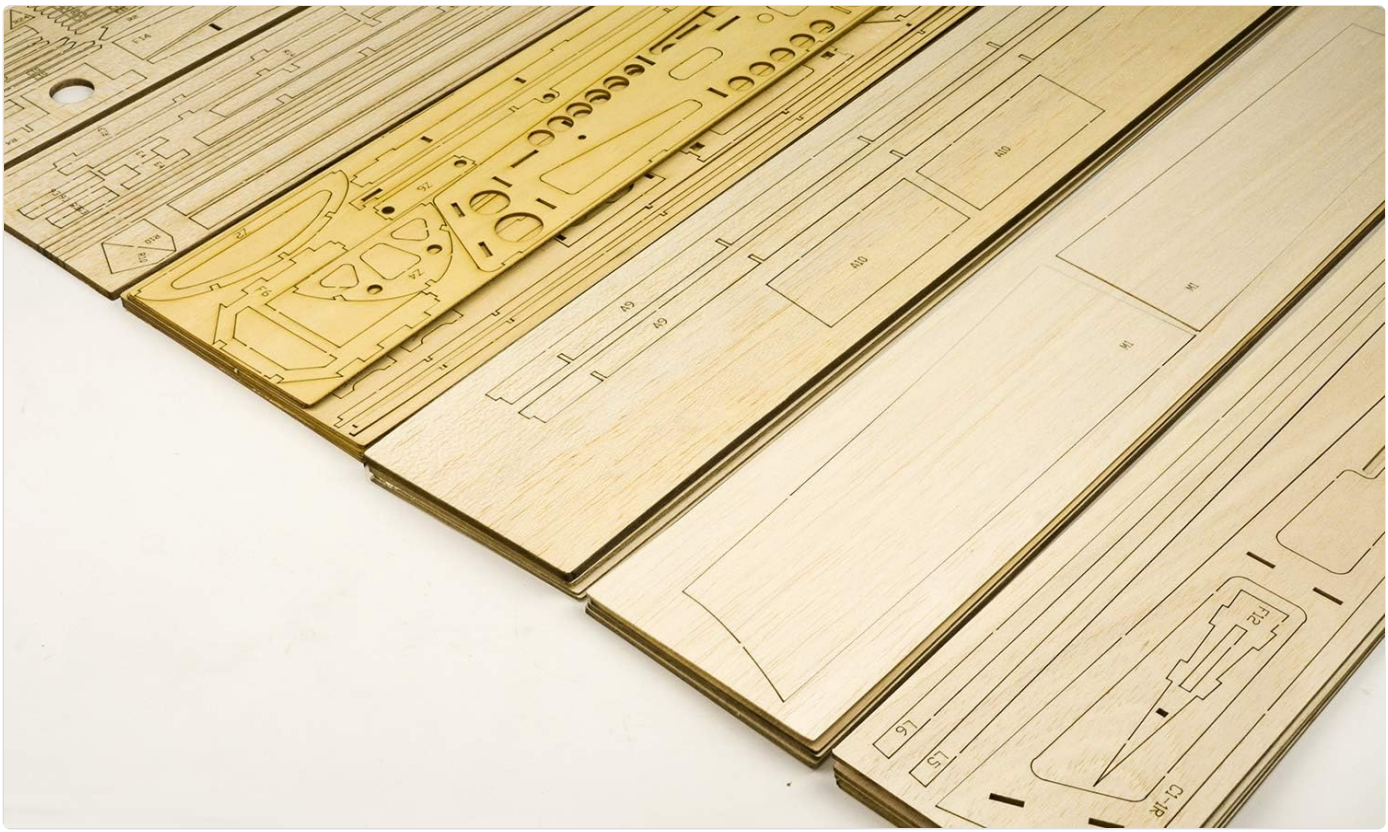

Image: Close-up of the laser-cut balsa and plywood sheets, ready for assembly.

Assembly Instructions (Setup)

This kit requires complete assembly. Follow the detailed instructions provided in the manufacturer's manual included with your kit. The process involves gluing laser-cut balsa and plywood parts, installing the landing gear, cowl, and windscreen, and covering the airframe with the supplied film.

Recommended Tools and Materials (Not Included):

- Model building adhesive (e.g., CA glue, epoxy, wood glue)
- Hobby knife or razor blades
- Sanding blocks and sandpaper
- Small clamps or pins
- Covering iron or heat gun for film application
- Basic hand tools (screwdrivers, pliers)

Key Assembly Steps:

1. **Fuselage Construction:** Assemble the laser-cut fuselage formers and stringers.
2. **Wing Assembly:** Construct the wing ribs and spars, ensuring proper dihedral (if applicable).
3. **Tail Section:** Assemble the horizontal and vertical stabilizers.
4. **Component Installation:** Install the landing gear, motor mount, and servo trays.
5. **Covering:** Apply the provided covering film to the airframe using a covering iron or heat gun.
6. **Final Assembly:** Attach the cowl, windscreen, and control surfaces.

Image: The EXTRA330 airframe in a partially assembled state, showing the balsa and plywood structure before covering.

Image: Front view of the assembled airframe, showcasing the molded cowl and landing gear.

Image: Top-down view of the assembled airframe, highlighting the wing and tail structures.

Operating Instructions

Once assembled and equipped with the necessary electronics, the EXTRA330 S2501B is a 4-channel radio-controlled aircraft. Proper setup of your radio transmitter and receiver is crucial for safe operation.

Suggested Power System (Not Included):

- **Motor:** 2216 1200KV
- **ESC:** 3S 20A
- **Servo:** 9g * 4 (for ailerons, elevator, rudder)
- **Propeller:** 9-11 inch
- **Battery:** 3S 1500-2200mAh LiPo
- **Radio:** 4-channel or more

Image: Technical specifications graphic, detailing recommended electronics and flight characteristics.

Pre-Flight Checklist:

1. Ensure all control surfaces move freely and correctly in response to transmitter inputs.
2. Verify battery is fully charged and securely installed.
3. Check propeller for damage and ensure it is securely attached.
4. Confirm center of gravity (CG) is within recommended limits (refer to the kit manual for specific CG location).
5. Perform a range check of your radio system.

Flight Environment:

Operate the model in a large, open area free from obstacles, people, and animals. Avoid flying in windy conditions, especially

during initial flights. Always maintain visual contact with the aircraft.

Maintenance

Regular maintenance ensures the longevity and safe operation of your EXTRA330 S2501B model.

- **Inspect Airframe:** After each flight, check the balsa and plywood structure for any damage, cracks, or loose joints. Repair as necessary using appropriate adhesives.
- **Check Covering:** Ensure the covering film remains taut and free from tears or wrinkles. Re-apply heat with a covering iron if needed to tighten.
- **Control Linkages:** Verify all control linkages (pushrods, clevises, horns) are secure and free from excessive play.
- **Motor and Propeller:** Inspect the motor for any debris and the propeller for nicks or cracks. Replace damaged propellers immediately.
- **Battery Care:** Follow manufacturer guidelines for LiPo battery charging, storage, and discharge.
- **Cleanliness:** Keep the model clean from dirt, grass, and oil residue.

Troubleshooting

Problem	Possible Cause	Solution
Aircraft does not respond to controls.	Transmitter/receiver not bound. Low battery in transmitter or aircraft. Loose servo connection.	Re-bind transmitter and receiver. Charge/replace batteries. Check all servo connections.
Motor not spinning.	ESC not armed. Motor/ESC/battery connection issue. Damaged motor or ESC.	Ensure throttle is at zero and arm ESC (refer to ESC manual). Check all power connections. Inspect components for damage.
Aircraft flies erratically.	Incorrect control surface throws. Improper Center of Gravity (CG). Windy conditions.	Adjust control surface throws on transmitter. Adjust battery position to correct CG. Fly in calmer conditions.

Specifications

Feature	Detail
Model Name	EXTRA330 S2501B
Brand	Dancing Wings Hobby
Wingspan	1025mm (1.0M)
Fuselage Length	965mm
Flying Weight	Approximately 700g
Material	Balsa Wood, Plywood
Channels Required	4-channel or more

Feature	Detail
Kit Type	Un-assembled Laser-Cutting Aeroplane Kit
Included Film	2M Blue + 2M Red
Manufacturer Minimum Age	18 years (216 months)

Warranty Information

This product is a model kit and typically does not come with an extensive warranty covering assembly or flight performance. Please inspect all parts upon receipt. For any missing or defective components directly from the manufacturer, refer to the warranty policy provided by Dancing Wings Hobby or the retailer at the time of purchase. Keep your proof of purchase.

Support

For technical assistance, assembly tips, or inquiries regarding your Dancing Wings Hobby EXTRA330 S2501B kit, please refer to the official Dancing Wings Hobby resources.

- **Manufacturer Website:** Consult the official Dancing Wings Hobby website for support documentation, FAQs, and contact information.
- **Retailer Support:** Contact the retailer from whom you purchased the kit for assistance with order-specific issues.
- **Online Communities:** Many RC hobby forums and communities offer valuable advice and support for building and flying balsa kits.

You can also visit the Dancing Wings Hobby Store on Amazon for more information and products.