

GoolRC T05 Vogee-08

GoolRC Dancing Wing Hobby T05 Vogee-08 820mm Balsa Wood RC Aeroplane Trainer KIT Instruction Manual

Model: T05 Vogee-08 | Brand: GoolRC

1. INTRODUCTION

This manual provides essential instructions for the assembly, operation, and maintenance of your GoolRC Dancing Wing Hobby T05 Vogee-08 820mm Wingspan Balsa Wood Remote Control Aeroplane Trainer KIT. Please read this manual thoroughly before beginning assembly or operation to ensure safe and correct use of the product. This kit is designed for hobbyists who enjoy building and flying remote control aircraft.

2. SAFETY INFORMATION

Operating remote control aircraft requires caution and adherence to safety guidelines. Failure to follow these instructions may result in injury or damage to property.

- **Adult Supervision:** This product is recommended for users aged 8-18 years, with adult supervision strongly advised for younger users.
- **Flying Environment:** Always fly in open areas, away from people, buildings, trees, and power lines. Avoid flying near airports or restricted airspace.
- **Weather Conditions:** Do not fly in strong winds, rain, or other adverse weather conditions.
- **Pre-Flight Check:** Before each flight, ensure all components are securely attached, the battery is fully charged, and the control surfaces respond correctly.
- **Propeller Safety:** Keep hands and face clear of the propeller when the motor is powered. The propeller can cause serious injury.
- **Battery Handling:** Use only recommended batteries and chargers. Follow all battery charging and storage instructions to prevent fire or explosion.
- **Chemicals:** When using glues or paints for assembly, ensure adequate ventilation and follow the manufacturer's safety instructions for those products.

3. PACKAGE CONTENTS

The GoolRC Dancing Wing Hobby T05 Vogee-08 KIT package includes the following components:

- 1 x Dancing Wing Hobby T05 Vogee-08 820mm Balsa Wood KIT (unassembled airframe components)

Note: The following essential items are **NOT** included in this KIT and must be purchased separately:

- Motor (Suggested: M1908-2050KV)
- Electronic Speed Controller (ESC) (Suggested: 20A)
- Folding Propeller (Suggested: 7-inch)
- Servos (Suggested: 9g * 4pcs)
- Receiver (RX) (Suggested: $\geq 4\text{CH}$)
- Transmitter (Remote Control)
- Battery (Suggested: 2S LiPo 800-1300mAh)
- Battery Charger
- Adhesive/Glue for balsa wood assembly
- Film pack for covering the airframe (optional, for finishing)

4. ASSEMBLY AND SETUP

The T05 Vogee-08 is a balsa wood KIT, requiring assembly of the airframe components and installation of electronic equipment. This section provides a general overview; detailed step-by-step instructions are typically provided with the physical kit or available from the manufacturer's website.

4.1 Airframe Assembly

Carefully unpack all balsa wood parts. Identify each component using the provided diagrams. Assemble the fuselage, wings, and tail sections using appropriate balsa wood glue. Ensure all joints are strong and square. Allow sufficient drying time for all adhesive applications.



Image 1: The GoolRC T05 Vogee-08 balsa wood RC aeroplane kit in its unassembled state, showing the intricate wooden framework of the fuselage, wings, and tail, along with the included landing gear. This image illustrates the primary components that require assembly.

BALSA WOOD MATERIAL

This remote control airplane is crafted from premium balsa wood, durable and not easy to damage.



Image 2: A visual representation highlighting the balsa wood construction of the GoolRC T05 Voge-08 kit. The image emphasizes the lightweight and durable nature of the balsa wood material used for the aircraft's frame.



Image 3: A top-down perspective of the unassembled GoolRC T05 Vogee-08 balsa wood RC aeroplane kit. This view clearly shows the full wingspan and the structural layout of the airframe components before covering.

4.2 Covering the Airframe (Optional)

Once the airframe is fully assembled and dry, you may choose to cover it with heat-shrink film or other suitable covering material. This step adds durability, aerodynamics, and visual appeal to the model. Follow the instructions provided with your chosen covering material.



Image 4: A fully assembled and covered GoolRC T05 Vogee-08 RC aeroplane, featuring a vibrant green and blue color scheme, positioned on an asphalt surface. This image demonstrates the finished appearance of the model after assembly and covering.

4.3 Electronic Equipment Installation

Install the motor, ESC, servos, and receiver into the airframe according to the kit's diagrams and the individual component instructions. Ensure all wiring is neat and secure, and that control surfaces (ailerons, elevator, rudder) move freely and correctly when commanded by the transmitter.

- **Motor:** Mount the motor securely to the firewall.
- **ESC:** Position the ESC for adequate cooling and connect it to the motor and battery.
- **Servos:** Install servos for ailerons, elevator, and rudder. Connect them to the respective control horns using pushrods.
- **Receiver:** Secure the receiver in the fuselage, ensuring antennas are positioned for optimal signal reception.
- **Battery:** Ensure the battery compartment can securely hold the recommended LiPo battery and allow for proper Center of Gravity (CG) adjustment.

4.4 Center of Gravity (CG)

Proper CG is critical for stable flight. Refer to the kit's specific instructions for the recommended CG location. Adjust the battery position or add ballast as needed to achieve the correct balance point.

5. OPERATING INSTRUCTIONS

Before your first flight, ensure you are familiar with your transmitter's controls and have performed all pre-flight checks.

5.1 Pre-Flight Checks

- **Battery:** Ensure the flight battery is fully charged and securely installed.
- **Control Surfaces:** Verify that all control surfaces (ailerons, elevator, rudder) move freely and in the correct direction relative to your transmitter inputs.
- **Propeller:** Check that the propeller is securely attached and free from damage.
- **Motor:** Briefly test the motor to ensure it spins smoothly and powerfully.
- **Range Check:** Perform a range check of your radio system according to your transmitter's manual.
- **CG:** Confirm the aircraft's Center of Gravity is within the recommended range.

5.2 Take-Off

Place the aircraft on a smooth, level surface facing into the wind. Gradually increase throttle while maintaining directional control with the rudder. As speed increases, gently apply up-elevator to lift off. For hand launches, ensure sufficient power and a smooth, level toss.

5.3 Flight

Maintain a safe altitude and distance from obstacles. Practice basic maneuvers such as turns, climbs, and descents. The T05 Vogee-08 is designed as a trainer, offering stable and predictable flight characteristics.

5.4 Landing

Approach the landing area into the wind. Reduce throttle and gradually descend. Maintain control with elevator and rudder. Aim for a gentle touchdown on the main landing gear, then allow the tail to settle. Cut throttle completely upon landing.

6. MAINTENANCE

Regular maintenance will extend the life of your model aircraft.

- **Post-Flight Inspection:** After each flight, inspect the airframe for any damage, loose connections, or worn parts.
- **Balsa Wood Care:** Keep the balsa wood airframe dry and away from extreme temperatures to prevent warping or damage. Repair any cracks or breaks promptly with appropriate glue.
- **Electronic Components:** Check motor, ESC, and servo connections. Ensure servos operate smoothly and without excessive play.
- **Propeller:** Replace any chipped, cracked, or unbalanced propellers immediately.
- **Cleaning:** Clean the aircraft with a soft, dry cloth. Avoid using harsh chemicals.
- **Storage:** Store the aircraft in a cool, dry place, protected from direct sunlight and physical damage.

7. TROUBLESHOOTING

This section addresses common issues you might encounter.

- **Aircraft does not respond to controls:**

- Check transmitter and receiver power.
- Ensure transmitter and receiver are properly bound.
- Verify all servo connections.
- **Motor does not spin:**
 - Check battery charge and connection to ESC.
 - Verify ESC connection to motor and receiver.
 - Ensure throttle trim is at its lowest setting.
- **Aircraft flies erratically or is difficult to control:**
 - Re-check Center of Gravity (CG).
 - Verify control surface throws and directions.
 - Inspect for any damage to the airframe or control linkages.
- **Short flight time:**
 - Ensure battery is fully charged.
 - Check for excessive drag or inefficient propeller.
 - Battery may be old or damaged and require replacement.

8. SPECIFICATIONS

Key specifications for the GoolRC Dancing Wing Hobby T05 Vogee-08 KIT:

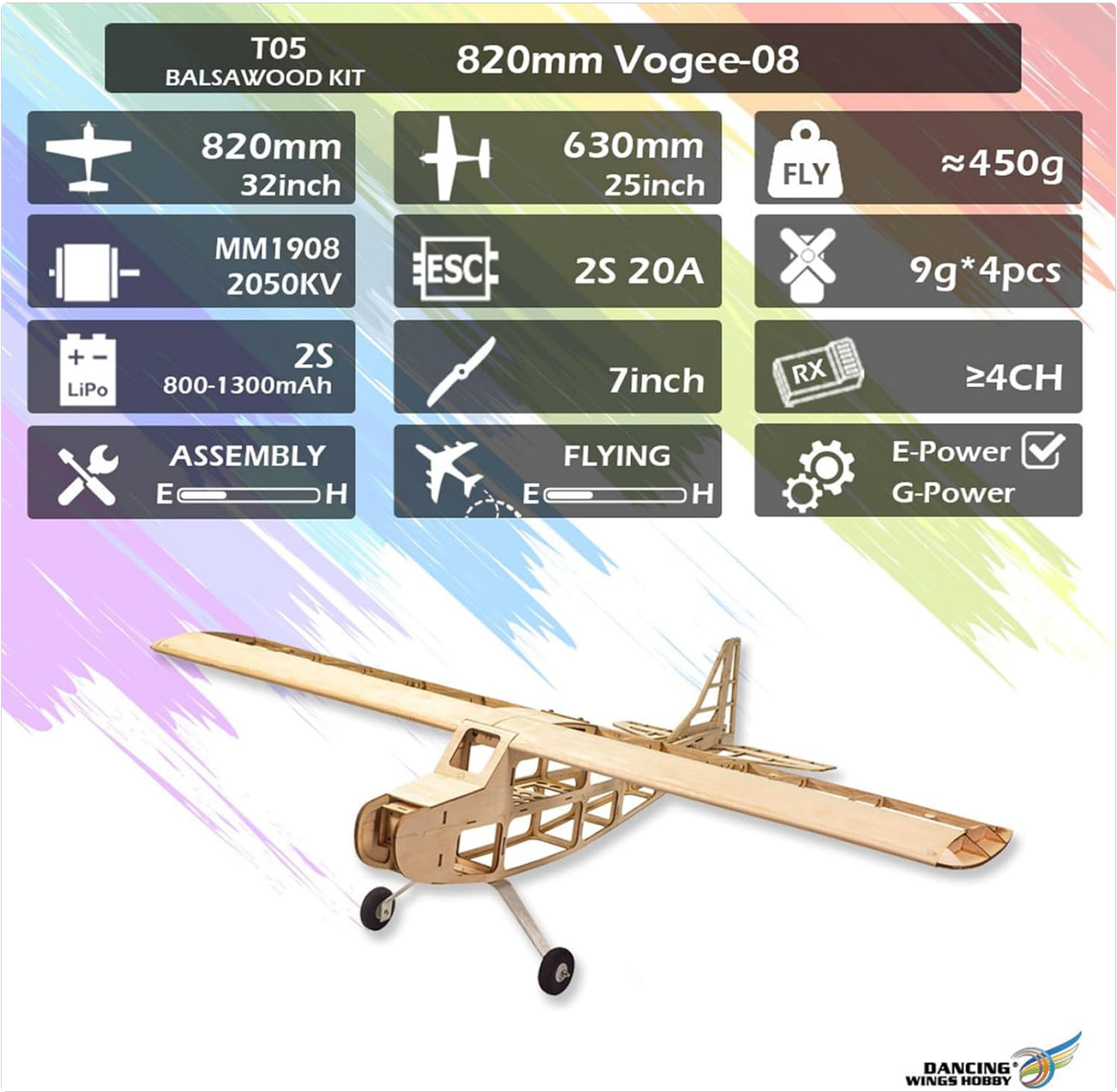


Image 5: An infographic detailing the key specifications of the GoolRC T05 Vogee-08, including wingspan, length, flying weight, wing area, wing load, and suggested electronic components.

Feature	Specification
Brand Name	Dancing Wing Hobby (GoolRC)
Item Name	T05 Vogee-08
Material	Balsa Wood
Wingspan	820mm (32 inches)
Length	630mm (25 inches)
Flying Weight	≈450g (≈1.0 lbs)
Wing Area	12.9dm²
Wing Load	35g/dm²

Feature	Specification
Recommended Age	8 - 18 years
Package Dimensions	58 x 11.5 x 7 cm (22.83 x 4.53 x 2.76 inches)
Package Weight	700g (1.54 lbs)

Suggested Equipment (Not Included):

- Motor: M1908-2050KV
- ESC: 20A
- Folding Propeller: 7-inch
- Servo: 9g * 4pcs
- RX: ≥4CH
- Battery: 2S LiPo 800-1300mAh

9. WARRANTY AND SUPPORT

For warranty information, technical support, or inquiries regarding your GoolRC Dancing Wing Hobby T05 Voge-08 KIT, please refer to the documentation included with your purchase or visit the official GoolRC website. Contact details for customer service are typically available through these channels.