

FLYWING FW450L

FLYWING FW450L Airwolf 450-Class RC Helicopter Instruction Manual

Model: FW450L | Brand: FLYWING

1. INTRODUCTION

Thank you for purchasing the FLYWING FW450L Airwolf 450-Class RC Helicopter. This model is a sophisticated 6-channel remote-controlled helicopter featuring a brushless motor, GPS tracking, and advanced flight control systems. Designed for enthusiasts, it offers both stable flight modes for beginners and advanced 3D manual modes for experienced pilots. Please read this manual thoroughly before operating the helicopter to ensure safe and optimal performance.

2. SAFETY PRECAUTIONS

Operating an RC helicopter requires caution and responsibility. Failure to follow safety guidelines can result in injury or damage to property.

- **Read the Entire Manual:** Familiarize yourself with all features and operational procedures before flight.
- **Age Recommendation:** This product is recommended for users aged 16 years and above.
- **Avoid Crowds:** Always operate the helicopter in open areas, away from people, animals, and obstacles.
- **Pre-Flight Inspection:** Before each flight, inspect the aircraft for any damaged parts, loose connections, or signs of wear. Ensure all electronic control equipment is functioning correctly.
- **Battery Safety:** Use only the specified battery and charger. Follow proper charging, storage, and disposal procedures to prevent fire or explosion.
- **Environmental Conditions:** Do not fly in strong winds, rain, or other adverse weather conditions.
- **Loss of Control:** In case of loss of control, immediately cut the throttle to prevent further damage or injury.

Improper assembly or unfamiliar operation, damaged parts, poor electronic control equipment, and unfamiliar operation may cause unpredictable accidents and injuries.

3. PACKAGE CONTENTS

The following items are included in your FW450L Airwolf package:

- Assembled Aircraft (FLYWING FW450L Airwolf RC Helicopter) x 1

- Remote Control x 1
- Handcrafted Painted Head Cover x 1
- Battery x 1
- Digital Display Charger x 1



Figure 3.1: Overview of the FLYWING FW450L Airwolf RC Helicopter, its remote control, and the product packaging.

4. SPECIFICATIONS

Detailed specifications for the FLYWING FW450L Airwolf RC Helicopter:

Feature	Specification
Material	Metal + Electronic Components
Fuselage Length (without paddles)	700mm

Fuselage Height	195mm
Fuselage Width	120mm
Weight (without battery)	790g
Main Rotor Diameter (Wingspan)	805mm
Main Rotor Length (Per Blade)	360mm
Tail Rotor Diameter (Wingspan)	164mm
Motor Gear	13T
Transmission Main Gear	8T
Tail Drive Motor	2008 Brushless Motor
Main Motor	2816 Brushless Motor (16V high-voltage)
ESC	60A Dual Brushless ESC (32-bit dual-processing)
Flight Control System	H1 Flight Control System with Omni-Directional Positioning Technology
Satellite Positioning Module	GPS/GLONASS with BeiDou satellite positioning system
Hovering Accuracy (Horizontal)	±1.5m (under normal GPS positioning mode)
Hovering Accuracy (Vertical)	±0.5m (under normal GPS positioning mode)
Product Dimensions	70 x 12 x 19.5cm (27.56 x 4.72 x 7.68 inches)
Item Weight	10000g (22 pounds)



Figure 4.1: The FW450L Airwolf helicopter highlighting its 80cm wingspan (main rotor diameter).

5. SETUP

Before your first flight, ensure the helicopter and remote control are properly set up.

5.1 Battery Installation and Charging

1. Carefully open the battery compartment on the helicopter.
2. Insert the provided battery, ensuring correct polarity and a secure fit.
3. Close the battery compartment.
4. To charge the battery, connect it to the digital display charger. Follow the charger's instructions for safe and complete charging. Always supervise charging.

5.2 Remote Control Preparation

1. Install the required batteries into the remote control (refer to the remote control's specific manual for battery type and installation).

2. Power on the remote control.
3. Power on the helicopter. The helicopter and remote control should automatically pair. If not, refer to the remote control manual for manual pairing instructions.

5.3 Pre-Flight Checks

- Visually inspect the main and tail rotor blades for any damage or cracks.
- Ensure all screws and fasteners are tight.
- Check that the landing gear is securely attached.
- Verify that the battery is fully charged and securely installed.
- Confirm that the remote control has sufficient battery power.

6. OPERATING INSTRUCTIONS

The FW450L Airwolf offers various flight modes and functions for diverse piloting experiences.

6.1 Basic Flight Controls

Familiarize yourself with the remote control's sticks and buttons. Typically, the left stick controls throttle (up/down) and yaw (left/right rotation), while the right stick controls pitch (forward/backward) and roll (left/right sideways movement).

6.2 Flight Modes

The H1 flight control system provides the following modes:

- **GPS Stabilized Mode:** Provides stable flight and precise hovering, ideal for beginners and general cruising. The omnidirectional GPS/GLONASS with BeiDou satellite positioning system ensures accurate positioning.
- **3D Manual Mode:** Offers full acrobatic capabilities, including flips, rolls, and inverted flight, for experienced pilots.

6.3 One-Key Functions

The helicopter includes several automated functions for ease of use and safety:

- **One-Key Return:** Initiates an automatic return to the take-off point.
- **Low Battery Return:** The helicopter will automatically return when the battery level is critically low.
- **Loss of Control Return:** If the signal between the remote and helicopter is lost, the helicopter will attempt to return to its last known position.
- **One-Key Inverted Flight:** Allows for easy execution of inverted flight maneuvers.

6.4 Semi-Autonomous Assisted Flight

Engage these modes for automated flight patterns:

- **Circular Motion:** The helicopter will fly in a circular path.
- **Figure-8 Route:** The helicopter will follow a figure-eight flight path.



Figure 6.1: A user holding the FW450L Airwolf helicopter and its remote control, demonstrating scale and handling.

Video 6.1: Demonstration of the FLYWING FW450L 2.4G RC Military Helicopter in flight, showcasing its maneuverability and stability.

7. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your helicopter.

- **Rotor Blades:** Inspect main and tail rotor blades for any damage, chips, or cracks after each flight. Replace damaged blades immediately.
- **Motors:** Keep the brushless motors clean and free from dust or debris. Ensure proper ventilation.
- **Battery Care:** Store batteries in a cool, dry place. Do not overcharge or over-discharge. If storing for extended periods, charge to approximately 50% capacity.
- **Cleaning:** Use a soft, dry cloth to clean the helicopter's fuselage. Avoid using harsh chemicals or solvents.
- **Fasteners:** Periodically check all screws and connections to ensure they are tight.



Figure 7.1: Detailed view of the tail rotor, an important component for flight stability and requiring regular inspection.

8. TROUBLESHOOTING

If you encounter issues with your FW450L Airwolf, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Helicopter does not power on	Battery not charged or improperly installed; power switch off.	Ensure battery is fully charged and correctly installed. Turn on the helicopter's power switch.
No response from remote control	Remote control batteries low; not paired with helicopter; interference.	Replace remote control batteries. Re-pair the remote and helicopter. Move to an area with less interference.
Unstable flight or drifting	Improper calibration; damaged rotor blades; strong wind.	Perform flight controller calibration (refer to remote manual). Inspect and replace damaged blades. Fly in calm conditions.
Short flight time	Battery not fully charged; aging battery; excessive maneuvers.	Ensure battery is fully charged. Consider replacing old batteries. Reduce aggressive flight maneuvers.

9. WARRANTY AND SUPPORT

Specific warranty information for the FLYWING FW450L Airwolf RC Helicopter is not provided in this manual. For warranty details, technical support, or replacement parts, please contact the seller or manufacturer directly. Keep your purchase receipt as proof of purchase.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question