



## **Prop Thruster Manual**

### **01. PRODUCT OVERVIEW**

This brushless thruster is designed to provide reliable propulsion for underwater applications, including stand-up paddle boards, and other aquatic vehicles.

 Important: Incorrect usage may cause personal injury or equipment damage. Please read this manual carefully before use and strictly follow the specified operating procedures.

This product uses a brushless DC motor with PWM control, offering high efficiency and three-speed operation. The thruster is fully submersible and designed for freshwater and saltwater environments. The product uses a maximum of 24 V DC and draws a maximum of 9 amps.

 Note: Specifications may vary slightly. Contact us for details on additional models.

### **03. REMOTE CONTROL DESCRIPTION**

The included wireless remote control allows for three-speed regulation of the thruster.

- Remote Control Distance: 50m
- Remote Size: 62 × 32 × 10 mm
- Operating Frequency: 433 MHz (ISM Band)
- Modulation Type: ASK/OOK (Amplitude Shift Keying / On-Off Keying)
- Antenna Type: Integrated PCB Antenna

Features:

- Three-Speed Regulation
- Emergency Stop
- Speed Increase

## 04. ELECTROMAGNETIC & RF COMPLIANCE DETAILS

### 4.1 RF Transmission Details

- Operating Frequency: 433.92 MHz
- Modulation Type: ASK/OOK
- Antenna Type: Integrated PCB Antenna

## 05. INSTALLATION INSTRUCTIONS

1. Put electronics in a Waterproof housing.
2. Pod wires leading to the motor.
3. Secure the thruster using bolts.
4. Ensure the thruster is fully submerged during operation for proper cooling.

## 06. USAGE INSTRUCTIONS & SAFETY GUIDELINES

- Do not over-voltage the thruster (Max 24V DC).
- The thruster must be fully submerged in water during operation for proper heat dissipation.
- Maximum water depth should not exceed the rated 100m, as deeper depths may cause failure.
- Before use insert a battery into the battery adapter and flip power switch to on.
- Mechanically press the arm on the micro-switch when in use.
- Keep foreign objects away from the propeller to prevent damage or injury.
- After use flip power switch to off position and remove battery.
- Rinse with fresh water after use in saltwater environments to prevent corrosion.
- Do not excessively bend the wires, as this may lead to damage.

## 07. PRECAUTIONS & WARRANTY INFORMATION

- The product comes with a 12-month warranty covering manufacturing defects.
- Warranty exclusions:
  - Damage caused by improper installation, over-voltage, or excessive current draw.
  - Modifications or unauthorized repairs.
  - Damage from water infiltration due to incorrect sealing.

## 08. FCC COMPLIANCE NOTICE

### FCC Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.


### FCC Radiation Exposure Statement

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The device can be used in portable exposure condition without restriction.

## 09. CONTACT INFORMATION & SUPPORT

For additional technical support or FCC compliance inquiries, contact:

 Email: [Duckdivecompany@gmail.com](mailto:Duckdivecompany@gmail.com)

 Phone: 1-910-431-9927

 Website: [www.propmotors.com](http://www.propmotors.com)