

uxcell a18110700ux0484

uxcell DC 6V 9400-9900RPM High Speed Motor Instruction Manual

Model: a18110700ux0484

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your uxcell DC 6V High Speed Motor. This motor is designed for various DIY projects, including small RC cars, boats, and other remote control applications. It features low noise, high speed, high efficiency, and low resistance, making it suitable for applications requiring compact and powerful rotational motion.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the motor. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Power Source:** Ensure the power supply voltage matches the motor's rated voltage (DC 6V). Using an incorrect voltage can damage the motor or power supply.
- **Polarity:** Observe correct polarity when connecting the motor to the power source. Incorrect polarity will cause the motor to rotate in the opposite direction.
- **Wiring:** Use appropriate gauge wires for connections. Ensure all connections are secure to prevent short circuits or loose contacts.
- **Moving Parts:** Keep fingers, hair, and loose clothing away from rotating parts during operation to prevent injury.
- **Heat:** Motors can generate heat during operation. Avoid prolonged direct contact with the motor casing. Ensure adequate ventilation if operating for extended periods.
- **Environment:** Do not operate the motor in wet or damp conditions. Avoid exposure to flammable gases or liquids.
- **Children:** This product is not a toy. Keep out of reach of children unless under direct adult supervision.

3. PRODUCT OVERVIEW

The uxcell DC 6V High Speed Motor is a compact and robust component designed for various applications. Its key features include:

- **Rated Voltage:** DC 6V
- **No-load Speed:** 9400-9900RPM
- **Construction:** Features high hardness steel for good toughness and impact resistance.
- **Durability:** Improved bearing quality and service life.
- **Applications:** Suitable for DIY projects, massage devices, game devices, game controllers, and cellphones.



Figure 3.1: Bottom view of the Uxcell DC 6V motor, illustrating the terminal connections and the plastic end cap.



Figure 3.2: Close-up of the motor's electrical terminals, showing the positive (red mark) and negative connection points.

4. SETUP

Follow these steps to set up your uxcell DC motor:

1. **Identify Terminals:** Locate the two electrical terminals on the motor. One terminal may be marked for positive (+) connection (often with a red dot or similar indicator), and the other for negative (-).
2. **Prepare Wires:** Strip a small amount of insulation from the ends of your power supply wires.
3. **Connect Power:** Connect the positive wire from your DC 6V power supply to the positive terminal of the motor. Connect the negative wire to the negative terminal. Ensure connections are firm and insulated to prevent short circuits.
4. **Mounting (Optional):** If integrating into a device, secure the motor using appropriate mounting hardware. Ensure the motor is stable and there is no obstruction to the shaft's rotation.
5. **Attach Load (Optional):** If attaching a propeller, wheel, or other load to the motor shaft, ensure it is securely fastened and balanced to prevent vibration.

5. OPERATING INSTRUCTIONS

Once the motor is set up, follow these guidelines for operation:

- **Power On:** Apply DC 6V power to the motor. The motor shaft should begin to rotate.
- **Direction of Rotation:** The direction of rotation depends on the polarity of the applied voltage. Reversing the polarity will reverse the motor's direction.
- **Monitoring:** Observe the motor during initial operation for any unusual noises, excessive heat, or vibrations.
- **Load Management:** Avoid overloading the motor, as this can lead to reduced performance, increased heat, and premature wear.
- **Duty Cycle:** For continuous operation, ensure the motor has adequate cooling. If the motor becomes excessively hot, allow it to cool down before further use.

6. MAINTENANCE

Proper maintenance can extend the lifespan of your motor:

- **Cleaning:** Keep the motor free from dust, dirt, and debris. Use a soft, dry cloth or compressed air to clean the exterior.
- **Inspection:** Periodically inspect the motor for any signs of wear, such as damaged wires, loose connections, or unusual shaft play.
- **Lubrication:** This motor is generally maintenance-free regarding lubrication. Do not attempt to lubricate internal components unless specifically instructed by the manufacturer.
- **Storage:** Store the motor in a dry, cool environment away from direct sunlight and corrosive substances.

7. TROUBLESHOOTING

If you encounter issues with your motor, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Motor does not run	No power, incorrect voltage, loose connections, motor damage.	Check power supply, verify voltage (DC 6V), secure all connections, inspect motor for visible damage.
Motor runs slowly or weakly	Low voltage, excessive load, internal friction.	Ensure adequate voltage, reduce load, check for obstructions to shaft rotation.
Motor makes unusual noise	Bearing wear, obstruction, unbalanced load.	Inspect for obstructions, check load balance. If noise persists, motor may require replacement.
Motor gets excessively hot	Overload, insufficient ventilation, prolonged operation.	Reduce load, ensure proper airflow, allow motor to cool down between uses.

8. SPECIFICATIONS

Detailed specifications for the uxcell DC 6V High Speed Motor:

Brand: uxcell

Model Name: gear

Item Model Number: a18110700ux0484

Rated Voltage: DC 6V

No-load Speed: 9400-9900 RPM

Motor Dimension: 39mm (Height) x 31.8mm (Diameter)

Shaft Diameter: 2mm / 0.07"

Shaft Length: 15mm / 0.6"

Material: Alloy Steel

Item Weight: Approximately 0.05 Kilograms (1.58 ounces)

Product Dimensions: 3.15 x 3.15 x 1.18 inches (packaging/overall)



Figure 8.1: Dimensions of the uxcell DC 6V motor, showing shaft length, shaft diameter, and motor body diameter.

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the purchase documentation or contact uxcell customer service through their official channels. Keep your proof of purchase for any warranty claims.

Visit the uxcell Store: [uxcell Official Store](#)

