

## Kyosho DR011-L

# Kyosho America DR011-L 8.5mm Reverse Rotation Motor for Drone Racer Instruction Manual

Model: DR011-L (K.DR011-R)

## 1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of the Kyosho America DR011-L 8.5mm Reverse Rotation Motor. This motor is designed as a replacement or spare part specifically for the Kyosho Drone Racer series. Please read this manual thoroughly before attempting any installation or use to ensure proper function and safety.

## 2. SAFETY PRECAUTIONS

- Always disconnect the drone's power source before installing or removing the motor.
- Handle the motor with care. Avoid dropping or subjecting it to impact.
- Ensure correct polarity when connecting the motor wires to avoid damage to the motor or drone's electronics.
- Keep small parts away from children to prevent choking hazards.
- Do not attempt to disassemble the motor. This may void any warranty and cause damage.
- Use only genuine Kyosho replacement parts to ensure compatibility and performance.

## 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Kyosho DR011-L 8.5mm Reverse Rotation Motor



**Figure 1:** The Kyosho DR011-L 8.5mm Reverse Rotation Motor. It features a cylindrical silver motor body, a small shaft extending from one end, and two twisted wires (one black, one white) terminating in a white two-pin connector.

## 4. INSTALLATION INSTRUCTIONS

---

This motor is a reverse rotation type, typically used for specific positions on multi-rotor drones. Refer to your Drone Racer's main instruction manual for specific motor placement and wiring diagrams.

1. **Prepare the Drone:** Ensure the Drone Racer's battery is disconnected. Remove any propellers and motor covers as instructed in your drone's manual to access the motor mounting area.
2. **Remove Old Motor (if applicable):** Carefully disconnect the old motor's wires from the drone's flight controller or ESC (Electronic Speed Controller). Unscrew or unclip the old motor from its mount.
3. **Install New Motor:** Place the new DR011-L motor into the designated motor mount. Ensure it is securely fastened according to the Drone Racer's assembly instructions.
4. **Connect Wiring:** Connect the motor's two-pin connector to the corresponding port on the drone's flight controller or ESC. Pay close attention to the wiring diagram in your Drone Racer manual to ensure correct polarity and motor rotation direction. This motor is a *reverse rotation* type, so it must be installed in the correct position for proper flight. Incorrect installation can lead to unstable flight or damage.
5. **Reassemble:** Reattach any motor covers and propellers. Ensure propellers are installed correctly for their designated rotation direction (clockwise or counter-clockwise).

**Note:** *Incorrect motor rotation or propeller installation can lead to loss of control during flight. Always double-check your work.*

## 5. OPERATION

---

The DR011-L motor operates as part of the Kyosho Drone Racer system. Once installed, its operation is controlled by the drone's flight controller and your remote transmitter. Ensure all connections are secure and the drone's battery is fully charged before attempting flight.

- **Pre-Flight Check:** Before each flight, visually inspect the motor for any loose wires, debris, or signs of

damage.

- **Test Rotation:** After installation, perform a low-power test to confirm all motors spin in the correct direction without propellers attached. Refer to your Drone Racer manual for this procedure.

## 6. MAINTENANCE

Regular maintenance helps prolong the life of your motor and ensures optimal performance.

- **Cleaning:** Gently clean the motor exterior with a soft, dry brush or compressed air to remove dust and debris. Avoid using liquids.
- **Inspection:** Periodically check motor wires for fraying or damage. Ensure the motor is securely mounted and the shaft spins freely without obstruction.
- **Storage:** When not in use, store the motor in a clean, dry environment, away from extreme temperatures and direct sunlight.

## 7. TROUBLESHOOTING

| Problem                                            | Possible Cause                                                                                             | Solution                                                                                                                                            |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor does not spin.                               | Loose or incorrect wiring connection. Damaged motor. Flight controller issue.                              | Check all wire connections. Ensure correct polarity. If motor is damaged, replace it. Consult Drone Racer manual for flight controller diagnostics. |
| Motor spins in wrong direction.                    | Incorrect motor placement (e.g., reverse rotation motor in a forward rotation position). Incorrect wiring. | Verify motor placement according to Drone Racer manual. Recheck wiring connections for correct polarity.                                            |
| Motor makes unusual noise or vibrates excessively. | Debris in motor. Damaged motor bearings. Loose mounting.                                                   | Clean motor carefully. Check for secure mounting. If noise persists, motor may be damaged and require replacement.                                  |

## 8. SPECIFICATIONS

**Brand:** Kyosho

**Model Number:** DR011-L (K.DR011-R)

**Motor Type:** 8.5mm Coreless Motor

**Rotation:** Reverse Rotation

**Material:** Plastic (housing/components)

**Product Dimensions:** 5.12 x 3.15 x 0.08 inches (packaging/overall); Motor dimensions are compact for drone integration.

**Item Weight:** Approximately 0.71 ounces  
**GTIN:** 04548565314171  
**Compatibility:** Kyosho Drone Racer series

## 9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Kyosho website or contact your authorized Kyosho dealer. Keep your purchase receipt as proof of purchase.  
**Kyosho America Website:** [www.kyoshoamerica.com](http://www.kyoshoamerica.com)

© 2025 Kyosho America. All rights reserved.

### 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