

RotorLogic AG01

RadioMaster AG01 Full CNC Hall Gimbal Set Instruction Manual

Model: AG01 | Brand: RotorLogic

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the RadioMaster AG01 Full CNC Hall Gimbal Set. Designed as an upgrade for the RadioMaster TX16s Radio Transmitter, these gimbals offer enhanced precision and durability for an improved control experience. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. SAFETY INFORMATION

- Always disconnect power from your RadioMaster TX16s transmitter before performing any installation or maintenance.
- Handle electronic components with care to avoid damage from static electricity. Consider using an anti-static wrist strap.
- Ensure all connections are secure and correctly oriented before reassembling the transmitter.
- Do not force components into place. If a part does not fit, re-check the instructions and component orientation.
- Keep small parts away from children.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package:

- 2 x RadioMaster AG01 Full CNC Hall Gimbals (Left and Right)
- Mounting Screws (pre-installed or separate, verify upon opening)
- Connection Cables (pre-attached to gimbals)

Note: The RadioMaster TX16s Radio Transmitter is sold separately and is required for use with this gimbal set.

4. PRODUCT OVERVIEW

The RadioMaster AG01 gimbals are precision-engineered control sticks designed for the TX16s transmitter. They feature full CNC machined aluminum construction for superior durability and Hall effect sensors for precise, drift-free operation. The adjustable stick tension and throw allow for personalized feel and control.

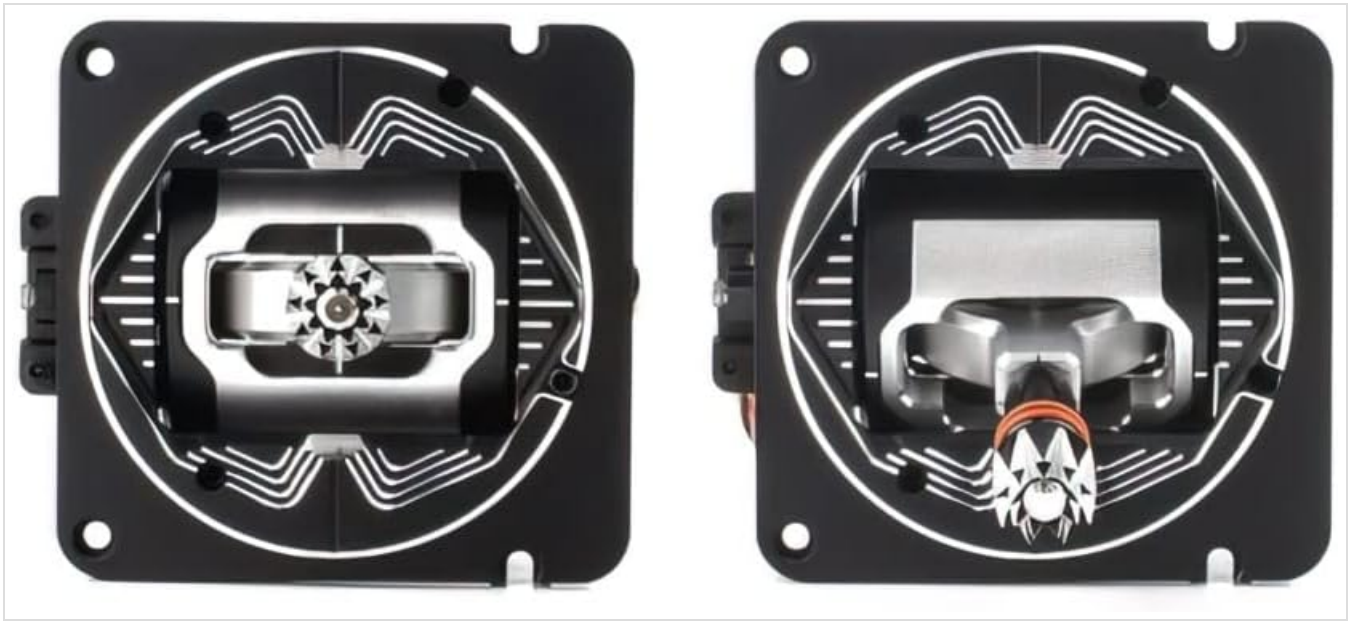


Figure 4.1: Front view of the RadioMaster AG01 Full CNC Hall Gimbals. The image displays two gimbals side-by-side, highlighting their robust metal construction and the intricate internal Hall sensor components responsible for precise control.

5. INSTALLATION AND SETUP

This section outlines the steps to install the AG01 gimbals into your RadioMaster TX16s transmitter. Basic tools such as a small Phillips head screwdriver are required.

1. Prepare the Transmitter:

- Ensure the TX16s transmitter is powered off and disconnect the battery.
- Carefully remove the rear casing of the TX16s by unscrewing all retaining screws. Refer to your TX16s user manual for specific casing removal instructions.

2. Remove Existing Gimbals:

- Locate the existing gimbals inside the transmitter.
- Carefully disconnect the wiring harnesses from the main circuit board. Note the orientation of the connectors.
- Unscrew the mounting screws that secure the gimbals to the front case of the transmitter.
- Gently remove the old gimbals.

3. Install AG01 Gimbals:

- Position the new AG01 gimbals into the corresponding slots in the front case. Ensure they are oriented correctly.
- Secure the AG01 gimbals using the provided mounting screws (or the screws removed from the old gimbals, if compatible). Do not overtighten.
- Connect the wiring harnesses of the AG01 gimbals to the appropriate ports on the TX16s main circuit board. Ensure the connectors are fully seated and correctly oriented.

4. Reassemble Transmitter:

- Carefully reattach the rear casing of the TX16s, ensuring no wires are pinched.
- Secure the rear casing with all retaining screws.

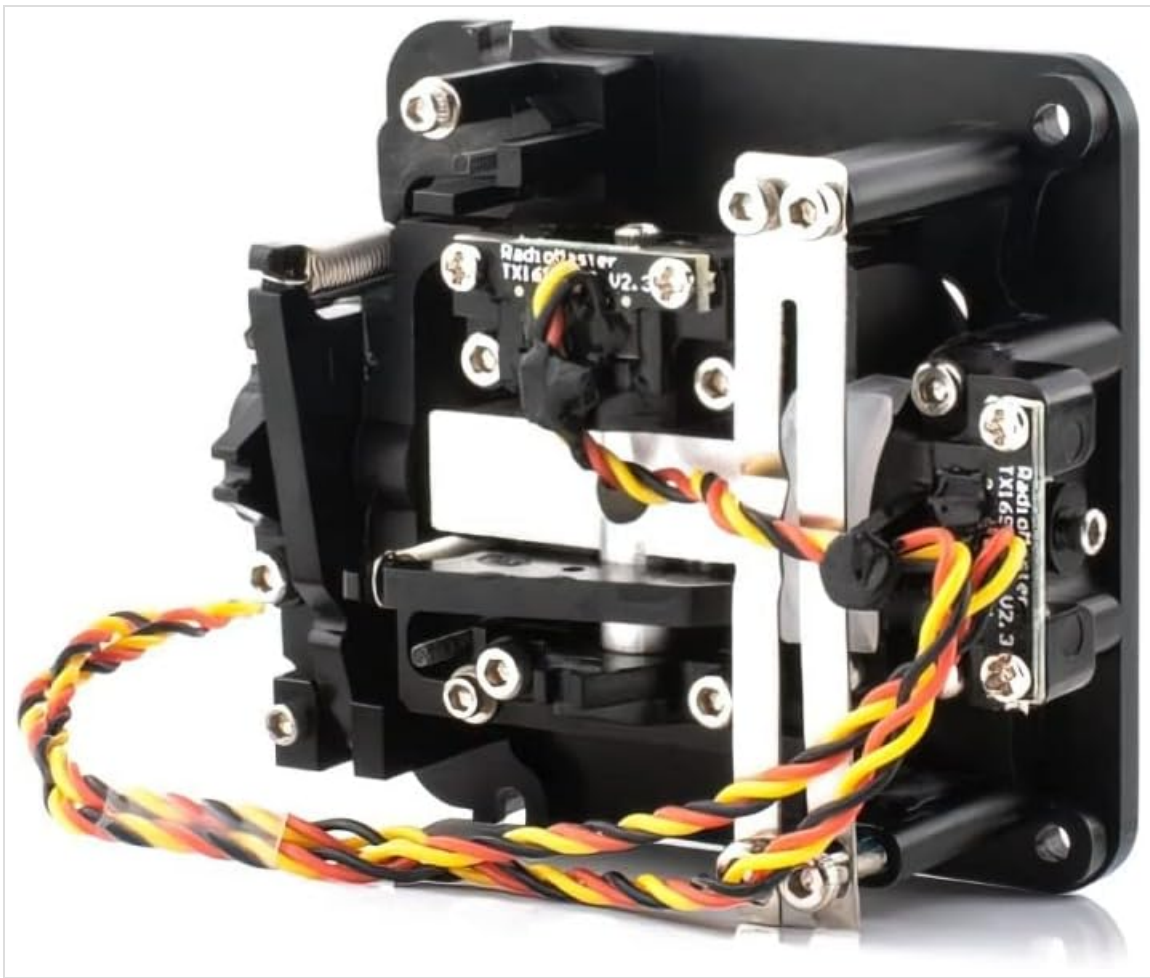


Figure 5.1: Side view of an installed RadioMaster AG01 gimbal. This image illustrates the compact design and the wiring connections, which are crucial for proper installation within the TX16s transmitter.

6. OPERATING AND CALIBRATION

After physical installation, it is crucial to calibrate the new gimbals within the TX16s firmware to ensure accurate stick response.

1. **Power On:** Reconnect the battery and power on your TX16s transmitter.
2. **Access Calibration Menu:** Navigate to the calibration menu within your TX16s firmware (typically found under Radio Setup or Hardware). Refer to your TX16s user manual for exact menu navigation.
3. **Perform Calibration:** Follow the on-screen prompts to calibrate the gimbals. This usually involves moving each stick through its full range of motion (up, down, left, right, and diagonally) and centering them.
4. **Verify Response:** After calibration, verify that the stick inputs are registering correctly and smoothly in the transmitter's monitor screen.

The AG01 gimbals feature adjustable stick tension. You can fine-tune the feel of the sticks using a small screwdriver to adjust the tension screws located on the gimbal mechanism. Experiment with different settings to find your preferred feel.

7. MAINTENANCE

The RadioMaster AG01 gimbals are designed for durability and require minimal maintenance. However, following these guidelines can extend their lifespan:

- **Cleaning:** Use a soft, dry cloth to wipe down the exterior of the gimbals. Avoid using harsh chemicals or abrasive materials.

- **Dust Protection:** When not in use, store your TX16s transmitter in a clean, dust-free environment or a protective case to prevent dust and debris from entering the gimbal mechanisms.
- **Inspection:** Periodically inspect the gimbals for any signs of wear or loose connections.

8. TROUBLESHOOTING

If you encounter issues with your AG01 gimbals, consider the following troubleshooting steps:

- **Gimbal Not Responding:**
 - Check all wiring connections to ensure they are securely seated on the main circuit board.
 - Verify that the gimbals are correctly installed and not obstructed.
 - Attempt recalibration through the TX16s firmware.
- **Inaccurate or Erratic Response:**
 - Perform a full gimbal calibration in the TX16s firmware.
 - Ensure no physical debris is interfering with the gimbal movement.
 - Check for any loose screws or components within the gimbal mechanism.
- **Physical Fit Issues:**
 - Double-check that the gimbals are correctly aligned with the mounting points in the TX16s case.
 - Ensure no wires are pinched during reassembly, which could prevent the case from closing properly.

If problems persist after attempting these steps, please contact customer support.

9. SPECIFICATIONS

Feature	Detail
Product Dimensions	2 x 3 x 3 inches
Item Weight	2 ounces
Manufacturer	RadioMaster
Gimbal Type	Full CNC Hall Sensor
Compatibility	RadioMaster TX16s Radio Transmitter

10. WARRANTY INFORMATION

The RadioMaster AG01 Full CNC Hall Gimbal Set is covered by a limited manufacturer's warranty. Please refer to the official RadioMaster website or your point of purchase for specific warranty terms and conditions. Keep your proof of purchase for warranty claims.

11. CUSTOMER SUPPORT

For technical assistance, troubleshooting not covered in this manual, or warranty inquiries, please contact RadioMaster customer support through their official website or the retailer from whom you purchased the product. Have your product model (AG01) and purchase details ready when contacting support.

12. OFFICIAL PRODUCT VIDEOS

No official product videos from the seller are available for embedding at this time.

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