Yokomo YG-302V2

Yokomo YG302V2 Version 2 Drift Steering Gyro Instruction Manual

Model: YG-302V2

1. Introduction

The Yokomo YG302V2 Version 2 Drift Steering Gyro is an electronic device designed to enhance the steering stability and control of RC drift cars. It automatically corrects steering input to maintain the desired drift angle, providing a more consistent and controllable drifting experience. This manual provides essential information for the proper installation, setup, and operation of your YG302V2 gyro.

2. Safety Information

- Always disconnect the battery from your RC vehicle before installing or performing maintenance on the gyro.
- Ensure all connections are secure to prevent short circuits or signal loss.
- Keep the gyro away from water, moisture, and extreme temperatures.
- Do not attempt to open or modify the gyro unit, as this will void the warranty and may cause damage.
- This product is intended for users aged 14 months and up, as recommended by the manufacturer. Adult supervision is advised for younger users.

3. Package Contents

Please verify that all items are present in your package:

- Yokomo YG302V2 Version 2 Drift Steering Gyro Unit
- Small Adjustment Tool (for gain adjustment)

Image 1: The Yokomo YG302V2 Drift Steering Gyro unit, featuring its compact black casing, integrated wiring harness with a standard receiver connector, and a small black adjustment tool. The gyro unit has switches labeled "REV/NOR" and "D/G" along with a "LIMIT GAIN" dial and an "LED" indicator.

4. Product Overview

The YG302V2 gyro features several key components for its operation and adjustment:

- **REV/NOR Switch:** Reverses the gyro's correction direction. Set to "NOR" (Normal) if the steering corrects in the wrong direction, or "REV" (Reverse) if needed.
- **D/G Switch:** Selects between Digital (D) and Analog (G) servo modes. Ensure this matches your steering servo type.
- **LIMIT GAIN Dial:** Adjusts the sensitivity or strength of the gyro's steering correction. Turn clockwise to increase gain, counter-clockwise to decrease.
- **LED Indicator:** Provides status feedback (e.g., power on, calibration status).
- **Integrated Wiring:** Connects to your receiver and steering servo.

5. Setup

5.1. Installation

1. Choose a flat, secure location on your RC car chassis, away from excessive vibration and heat sources.
2. Use double-sided foam tape (not included) to firmly mount the gyro unit. Ensure the gyro is mounted parallel to the chassis centerline for optimal performance.

5.2. Wiring

1. Connect the gyro's input wire (usually marked with a single connector) to the steering channel (typically Channel 1) of your RC receiver.
2. Connect your steering servo's wire to the gyro's output port (usually marked for servo connection).
3. Ensure all connections are correctly oriented (signal, positive, negative). Refer to your receiver and servo manuals if unsure.

5.3. Initial Configuration

1. **Servo Type Selection:** Set the D/G switch on the gyro to match your steering servo type. "D" for Digital servos, "G" for Analog servos. Incorrect setting can damage your servo or gyro.
2. **Power On:** Connect your RC car's battery. The gyro's LED should illuminate.
3. **Gyro Direction Check (REV/NOR):** Gently turn your RC car left and right by hand. Observe the steering servo's reaction. If you turn the car to the right, the servo should automatically steer left to counteract the movement. If it steers in the same direction, flip the REV/NOR switch. Repeat until the correction is opposite to the car's movement.
4. **Initial Gain Setting:** Start with the LIMIT GAIN dial set to approximately the middle position. You will fine-tune this during operation.

6. Operating the Gyro

1. Once installed and configured, the gyro will automatically assist with steering stability.
2. **Gain Adjustment:** While driving your RC drift car, observe its behavior.
    - If the car feels unstable or lacks sufficient steering correction, slowly increase the LIMIT GAIN by turning the dial clockwise using the provided adjustment tool.
    - If the car exhibits "hunting" (rapid, oscillating steering movements) or feels overly sensitive, slowly decrease the LIMIT GAIN by turning the dial counter-clockwise.
3. The optimal gain setting will vary depending on your chassis, tires, surface, and driving style. Adjust incrementally until you achieve a smooth, controllable drift.

7. Maintenance

- Keep the gyro unit clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Regularly check all wiring connections for looseness or damage.
- Ensure the gyro remains securely mounted to the chassis.
- Avoid exposing the gyro to direct sunlight for extended periods or storing it in high-temperature environments.

8. Troubleshooting

Problem	Possible Cause	Solution
Gyro LED does not light up.	No power or incorrect connection.	Check battery connection. Ensure gyro is correctly plugged into the receiver.

Problem	Possible Cause	Solution
Steering corrects in the wrong direction.	Incorrect gyro direction setting.	Flip the REV/NOR switch on the gyro.
Steering servo "hunts" or oscillates rapidly.	Gain setting is too high.	Decrease the LIMIT GAIN using the dial.
Gyro has no effect or minimal correction.	Gain setting is too low or incorrect servo type.	Increase the LIMIT GAIN. Verify D/G switch matches your servo type.

9. Specifications

- **Model:** YG-302V2
- **Product Dimensions:** 3.94 x 3.94 x 3.94 inches
- **Item Weight:** 0.704 ounces
- **Manufacturer Recommended Age:** 14 months and up
- **Manufacturer:** Yokomo

10. Warranty and Support

For warranty information and technical support, please refer to the official Yokomo website or contact your authorized Yokomo dealer. Keep your purchase receipt as proof of purchase.