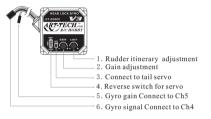
# Gyroscope (AT-EG301) Manual

This gyroscope uses digital PID control method. It has a built-in temperature compensation circuit and thus greatly reduces the impact of temperature change on the midpoint offset. It has two working modes: locked mode and standard mode. With multi-gain controls and many adjust methods, this gyro can perform head-lock function easily. It is easy to fit different kinds of helicopters. It is a good choice for hovering, flying routes, reverse flight and other stunt flying.

## Gyro adjustment



#### Picture of control set connection



## Feature

## Specification

- 1. Built-in lock mode and standard mode
- 2. Built-in temperature compensation circuit
- 3. Multi-gain control adjustment function
- 4. Gyroscope normal/reverse direction switch
- 5. Rudders itinerary adjustment function

- 1. Working Voltage : DC 4V-6V
- 2. Working currency: 40mA
- 3. Weight: 15g
- 4. Dimension: 31mm \* 31mm \* 23mm

connect to

tail servo

#### Installation and operation steps

1. Make sure the radio control system and the servos are in good working condition, and the angle of the servo arms are installed correctly.

2. Fix the gyroscope to the right position close to the location of the center of gravity as in the picture.



3. Plug the signal lines of the gyroscope into CH4 and CH5 signal connecters of the receiver respectively and fix the servo on the tail pipe.

4. Turn on the transmitter and place the rudder joystick and the fine-tuning in their central positions. Turn on the receiver and wait until the LED on the gyroscope turns on. Do not disturb the helicopter before the LED turns on. The gyroscope is reading information from the transmitter and the initial position of the helicopter. About 7 seconds later, after the signal is received, the LED will turn on and the gyro starts working. Otherwise, the LED will flash constantly and you need to check whether connections are normal and whether the battery is discharged, etc.

5. Set the reverse switch on the gyroscope. Turn the head of the helicopter left, if the movement of the servo on the tail pipe is the same as the movement when turning the rudder joystick right, it means the direction is OK. Or you will need to switch the reverse switch to the other end.

6. Rudder itinerary adjustments: the role of the fine-tuning of the rudder trip is as follow: when you adjust the fine-tuning clockwise, the itinerary of the rudder increases. It means when you turn the rudder joystick, the rotation angle of the tail increases and the rotation of the tail is more flexible (for stunt mode), and when you adjust the fine-tuning counterclockwise, the itinerary of the rudder reduces. It means when you turn the rudder joystick, the rotation angle of the tail decreases and the rotation of the tail is more flexible (for ordinary hovering).

7. Gain adjustment: Test the helicopter, watch whether there is a deflection on the tail. If the tail turns clockwise, you need to turn the gain switch clockwise to increase the gain and vice versa. (Note: When you insert the gain control signal line into CH5 of the receiver, the gain of the gyroscope is under control of CH5 of the transmitter. You can only adjust the gain of the gyroscope by adjusting the signal of CH5 of the transmitter. If the output of CH5 is bigger than 50%, the gyroscope works at head-lock mode and its gain increases as the signal of Ch5 increases; while if the output of CH5 is smaller than 50%, the gyroscope works at common mode and its gain increases as the signal of Ch5 decreases. At this time, it is useless to adjust the GAIN fine-tuning of the gyroscope. If the gain control signal line is not inserted into Ch5 of the receiver, the gyroscope works at head-lock mode, at this time the gain of the gyroscope is under control of the GAIN fine-tuning and you only adjust the gain of the gyroscope by adjusting the GAIN fine-tuning of the gyroscope. )

Suggestion: if there is no deflection on the tail, it is better to increase the gain of the gyroscope.