

3 Axis Gyro Stabilizer

Improves Flight Stability
Perfect for Beginner or Experienced Pilots

Designed for
Airplanes



Product Instruction Manual

PRODUCT DESCRIPTION and FEATURES

Description:

- Input Voltage: 4V- 6VDC (supplied by receiver/ESC thorough inputs)
- Current Consumption: 18mA
- Supported Protocols: PWM
- Working Temperature: -20°C to 65°C
- Size: 40x30x13mm
- Weight: 10g without leads

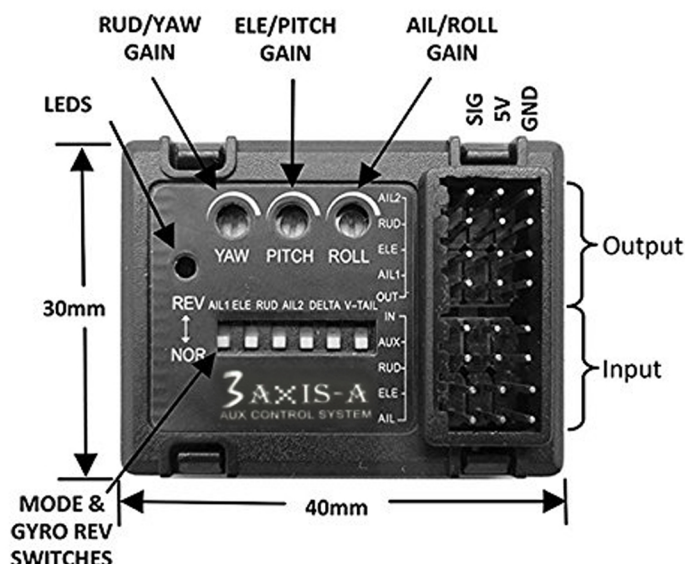
Features:

- Specifically designed for RC airplanes
- 3 axis gyro improves flight stability and flexibility
- Reduces impact from outside forces like wind
- 3 modes: Standard airplane, Delta wing, V-tail
- Optional ability to turn off stabilization remotely via Aux input
- Indicator LEDs show current status and mode
- Adjustable gyro sensitivity on all 3 axis
- Gyro reversing switches on all 3 axis
- Convenient 2nd aileron output
- Simple to install in already built airplane

PRODUCT DIAGRAM

Diagram:

- Gyro Gains: Yaw = Rudder gain; Pitch = Elevator gain; Roll = Aileron gain (Increase CW, Decrease CCW)
- Red LED: Indicates Stabilization On/Off (On = Stabilization On; Off = Stabilization Off)
- Green LED: Indicates Mode (Off = Standard, Solid On = V-tail, Flashing = Delta)

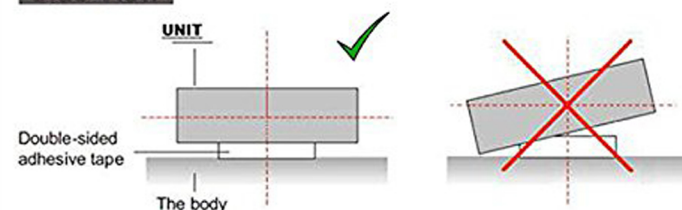


PRODUCT INSTALLATION

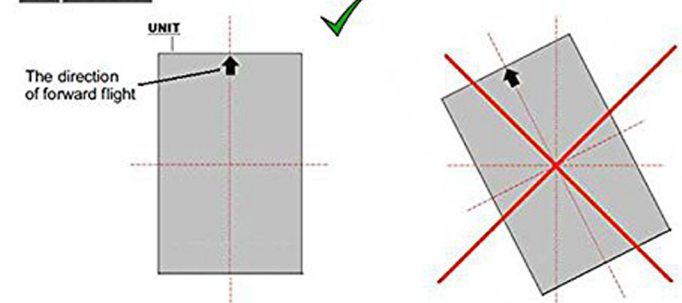
Installation Instructions:

1. Install unit with supplied double-sided tape with short dimension toward front of airplane. Either short dimension can be placed toward front but gyros may need to be reversed with switches on front of unit
2. Ensure unit is mounted secure, flat, not twisted and ideally near the center of gravity

Side View



Top View



PRODUCT WIRING

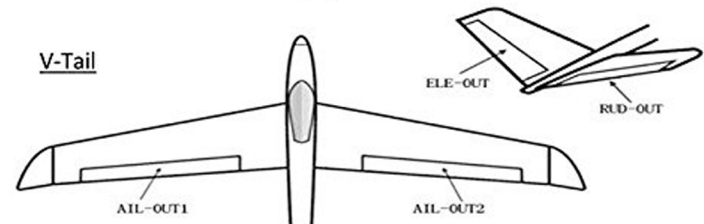
Wiring Instructions:

1. Using supplied signal cables, attach unit's AUX, RUD, ELE and AIL inputs to receiver outputs
2. Ensure SIG, 5V and GND correct
3. Attach unit's output to control surface servos using the diagrams below matching your airplane configuration:

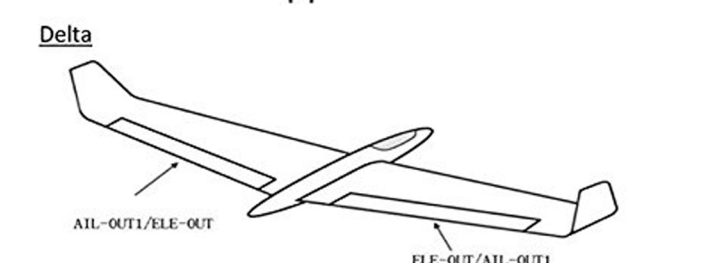
Standard



V-Tail



Delta



PRODUCT CONFIGURATION and ADJUSTMENT

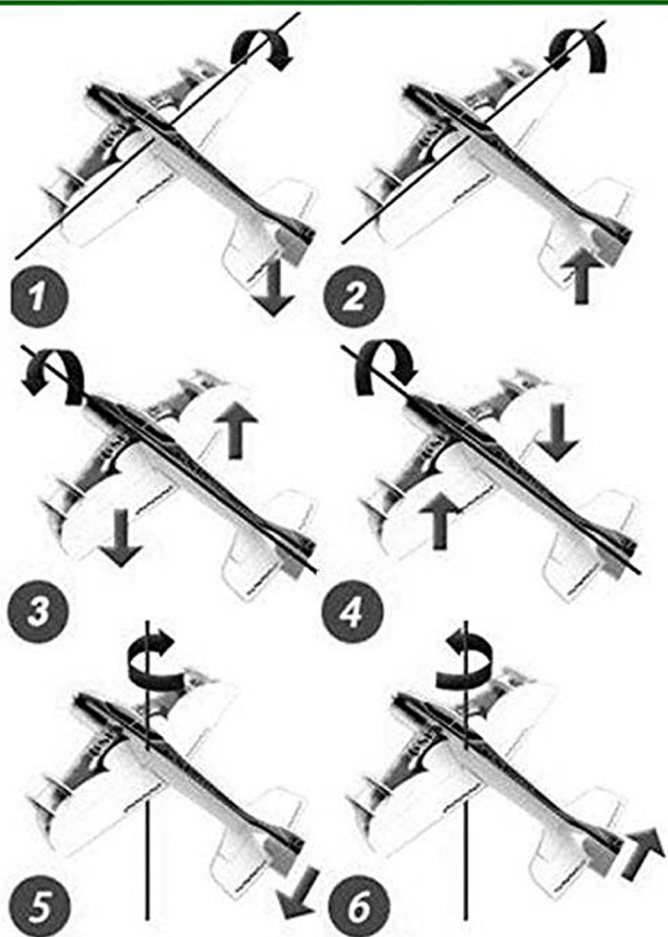
Configuration Instructions:

1. Stabilization On/Off is selected by AUX switch on transmitter (Red LED is lit). If no Aux channel is connected, stabilization is on by default
2. Standard mode is selected when both the V-tail and Delta switches are the NOR or REV position (Green LED is off)
3. V-tail mode is selected when V-tail switch is in NOR position and Delta switch is in REV position (Green LED is lit solid)
4. Delta mode is selected when Delta switch is in NOR position and V-tail switch is in REV position (Green LED is flashing)

Adjustment Instructions:

1. As precaution, remove propeller during first configuration and adjustment
2. Check that control surfaces are moving correctly with transmitter, reverse with transmitter settings if needed
3. Using reaction diagrams on next page, verify signal output direction from gyro while applying external force. Gyro should move servo to counteract external force
4. If a particular gyro reacts with wrong direction, reverse gyro using switch on unit
5. Adjust each gain to 1/3 or 1/2 to start with. Increase only slightly after watching reaction from external force. If reaction is jittery, decrease gain.

PRODUCT REACTION DIRECTIONS



PRODUCT FINAL NOTES

Final Notes:

- Optimal gyro adjustment can only be determined with a test flight. Better to start with less gyro gain and increase slightly after each successful test flight
- When configured and adjusted properly, the Hobbymate 3 Axis Gyro Stabilizer can greatly assist the beginner or even experienced RC airplane pilot
- CAUTION: Incorrect installation, configuration or adjustment can cause the unit to function improperly or even cause a crash