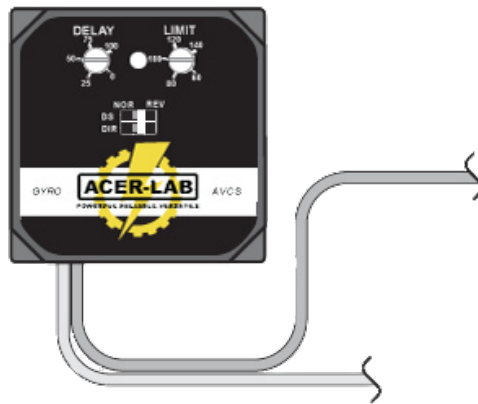


ACER-LAB



AL-G1000 *AVCS Gyro*

Functions:

Minimizes crosswind affects.
Uses angular acceleration command function.
Sensor vibration proofing.
Simple sensitivity adjustment.

Specifications:

Digital proportional R/C system
Dimensions(mm): 28*28*20
Operating voltage: 4.8V ~ 6V
Operating temperature: -10°C ~ +45°C
Operating current: 80mA

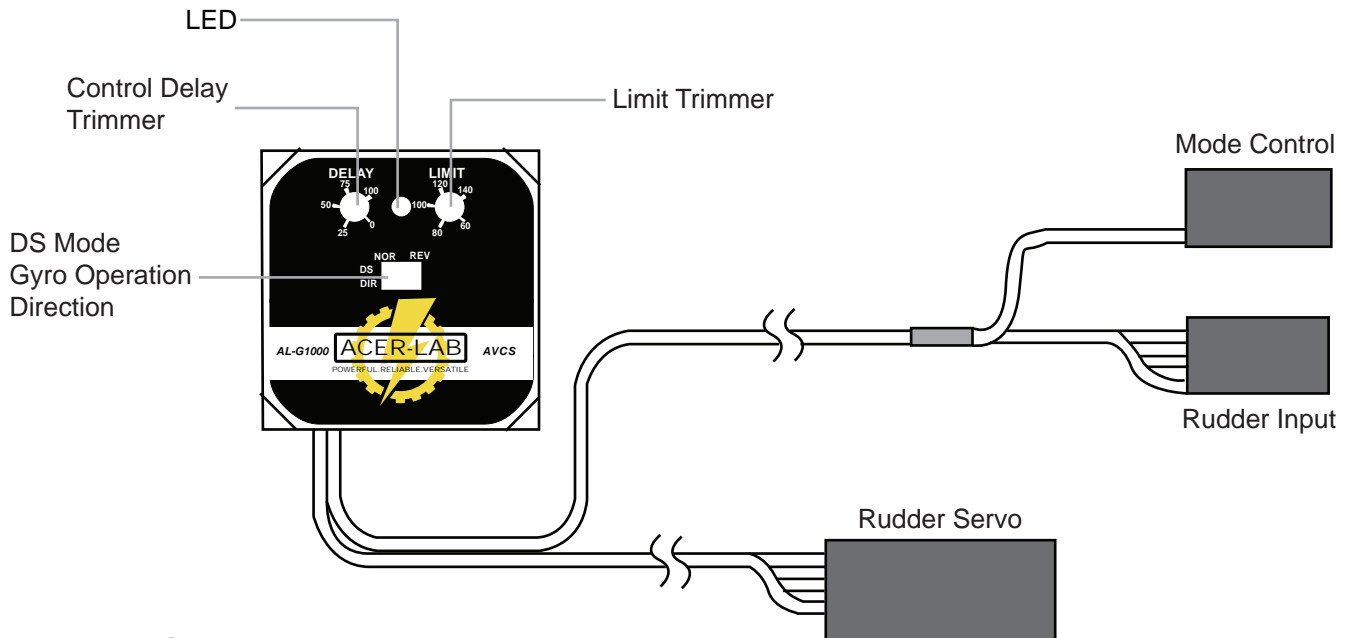
ACER-LAB
POWERFUL RELIABLE VERSATILE

The AL-G100 is specifically designed for application on Remote Controlled Helicopters. It features both a rate and AVCS mode.

The ACER-LAB's AVCS system delivers outstanding stability.

Head Lock system:

As the rudder is affected by cross winds the altitude changes are automatically counteracted and rudder operation is stabilized - ensuring easier 3D flight.



Servo selection:

The AVCS function of gyro is effected by the type of tail servo you use, the result is more effective when used in conjunction with a digital tail servo. It is recommended that you use Futaba S9257 or S9650 digital servo or similar. Please note that it is not possible to use digital servos in conjunction with the Helivol Alien Command.

When using a digital servo for the tail servo please set the DS mode switch to the ON position. While using an analogue servo please set it to the OFF position.

NOTE: if using an analogue servo, setting the DS switch toto the ON position will result in damage toto the servo

AVCS mode adjustment:

If using digital servo, please set the delay time trimmer to "0". While using an analogue servo please adjust the delay setting to suite.

Check gyro operation direction:

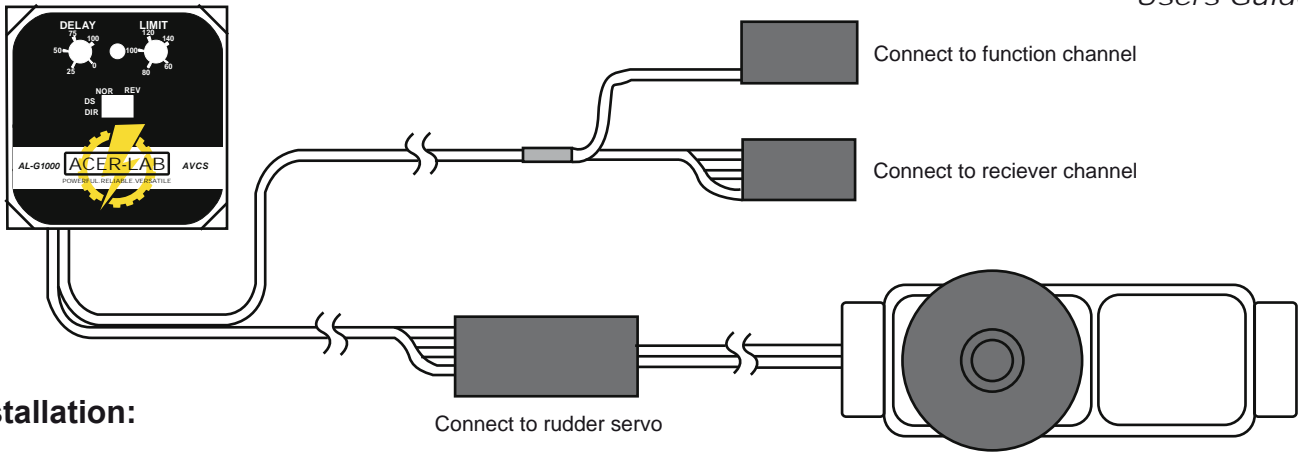
Lift the helicopter with the tail in your right hand. Rotate it anti clockwise the tail servo should pull the push rod toward the frame.

If the direction is not correct, please change the direction switch.

If the operational direction of the gyro is incorrectly calibrated high speed rotation will result. This can be dangerous. Please double check the gyros direction before operation.

Adjust maximum travel of tail rudder servo:

Calibrate the limit trimmer so that the tail servo operating angle does not strike the linkage. During flight, the servo will not operate beyond this limit and the linkage will be protected. If the setting is too low, the gyro performance will be affected.



Installation:

When installing the ACER-LAB on your helicopter, please use the double sided sponge tape included. Make sure the bottom of gyro is perpendicular to the main shaft of helicopter. Otherwise it will effect the direction in roll and pitch. When installing on to an electric helicopter, please make sure the distance to motor is no less than 10cm to avoid interference.

LED Display	Gyro operation state
Rapid flash	Gyro is initializing once power is turned on.
Steady light	Gyro is operating in the AVCS mode.
OFF	Power is off or gyro is operating in the rate mode.
Slow flash	Gyro has failed to correctly initialise. Possibly due to incorrect installation of rudder servo or signal interruption during calibration.
Intermittent flash	Indicates power is on in rate mode and gyro cannot calibrate correctly. To resolve please switch gyro mode to AVCS and disconnect power. Reintialise in AVCS mode.
Double flash	Happens when the rudder stick is operated during calibration - reinitialisation necessary to remedy.
Function	Explantion
DS mode switch	Digital servo mode switch. When using a digital servo, set to the on position. While using the normal one, set to off position or servo will be damaged.
Gyro operational direction switch	Adjust controlling direction of the gyro, it must be set correctly according to the rotational direction of the main rotors on the helicopter and the direction of the rudder.
Control delay trimmer	Adjust operational speed of the rudder control signal. If using slower speed servo on rudder, please turn the knob clockwise to increase the delay time. If using a higher speed digital servo please turn anticlockwise to decrease delay.
Limit trimmer	Adjust operation speed of rudder control signal. If using slower speed rudder, please turn the knob clockwise to increase delay time, then you can stop tracing. If using high speed digital servo, please turn the knob anticlockwise to the position of "0" .
Rudder input connector	Connect to the receiver rudder channel(CH4)
Rudder servo connector	Connect to the rudder servo.
Mode control connector	Connect to the receiver sensitivity switching channel (normally CH5). This connector can be simultaneously used to switch the sensitivity of gyro between the AVCS and normal modes. Since this connector is a single line, do not pull it forcefully.

WARRANTY INFORMATION

HELIVOL guarantees this GYRO to be free from defects in both material and workmanship at the date of purchase. This warranty does not cover any component parts damaged by use or modification.

HELIVOL SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the liability of HELIVOL exceed the individual price of the product on which liability is asserted.

As HELIVOL has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury.

By the act of use, setup or assembly, the user accepts all resulting liability.

To make a warranty claim please contact:
charles@helivol.com

Please include a detailed description of the problem and proof of purchase. Upon receipt of the package the problem will be evaluated as quickly as possible.

The Helivol Two Year Warranty Guarantee

But what does it mean?...



At Helivol we have years of experience in the RC Helicopter market. We use and test all these products to ensure quality to the highest level.

We offer a 2 year warranty on these products, so rest assured, they are of the highest quality and workmanship.

www.helivol.com

