



### Installation Notes:

1. Orient with the end opposite the d-sub connector toward the front of the aircraft.
2. The recommended location for the magnetometer is in the wingtip. The magnetometer must be as far away as practical from ferrous metal, moving ferrous metal (such as belcranks, landing gear, etc), stainless steel cables, wiring that carries DC currents, strobe power supplies, motors, magnets, steel counterweights, transmitting antennas, or anything else that causes magnetic interference. It may be possible to locate the magnetometer in the fuselage, as far from the engine as possible, but this is not recommended unless necessary.
3. If mounting within 5' of transmitting antennas, or in any location in a composite aircraft, be sure to test the location by observing the raw magnetometer reading on the EFIS while transmitting.
4. Do not locate within 18 inches of a strobe power supply, or electric motors.
5. Route wires carrying heavy currents (such as landing lights) so they do not pass closer than 12 inches to the magnetometer.
6. A location can be tested using an app in a smartphone called "Magnetmeter", or "GPS Status". These apps display the magnetic field strength, and the direction of the magnetic field. Use the app to measure the earth magnetic field strength when far from any possible sources of magnetic interference. Then place the phone in the proposed location of the magnetometer, and verify the **field strength** in this location is unchanged. Next, move the flight controls, turn on power to everything in the airplane, and observe that the **strength and direction** of the field does not change.
7. The magnetometer must be mounted in the same orientation as the AHRS/Air Data Computer to within 0.5 degrees. This is most easily accomplished by observing the "accelerometer roll", and "accelerometer pitch" readings on the display unit "AHRS Maintenance" page, and adjusting the mounting of the magnetometer to match using a protractor or digital level. Be sure to consider which way is left or right roll, and which way is pitch up or down.
8. The magnetometer is not affected by temperature or moisture.
9. Mount with brass or nylon hardware only.

# Magnetometer Installation

Grand Rapids Technologies, Inc.

5/15/12  
Rev D

Mag\_D.cdr