RC GPS

GPS receiver for RC Multi device



Manual version: 1.3

RC Electronics

support@rc-electronics.org; http://www.rc-electronics.org

Contents

ntroduction	
Key features	
Specifications	
Physical overview	
Operating with the RC GPS module	
Ordering information	
Revision history	

Introduction

The RC GPS module is a GPS receiver which calculates its position on Earth. It calculates longitude, latitude, altitude and ground speed. Those parameters are then sent to the RC Altimeter/RC Multi module and are stored there for later review. With these parameters you can later track your flight in 3D with Google Earth.

Key features

- Lightweight at only **9 grams** with cable.
- Small: 19 mm x 19 mm x 10 mm.
- Plug & play.
- Current consumption 40 mA.
- 66 channels parallel.
- MKT chipset.

Specifications

Board Dimensions	19 mm x 19 mm x 10 mm 0.75" x 0.75" x 0.39"
Weight	10 grams
Temperature Range ¹	-10 °C ~ +60 °C
Current consumption	40 mA
Setup time	1-2 min

¹ Specifications are taken from component ratings and system limits and may not have been tested to the full extent of the specified ranges.

Physical overview

Figure 1 shows the RC GPS module. When you install the RC GPS module into plane, you must turn antenna in a position, that gray side looks up towards sky and no metal/carbon plate/object is on its way. The best way is to put the RC GPS module outside of the plane/model.

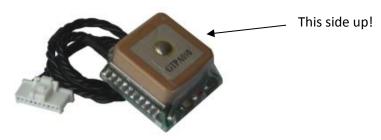


Figure 1: The RC GPS module.

Operating with the RC GPS module

Please connect the RC GPS module to the RC Multi first and then power up the system!

When you connect the RC GPS to the RC Multi and apply power, red LED will turn ON (indicating that there is supply voltage present) and yellow LED will start flashing until good fix (3D position) is established. After 3D fix is established, yellow LED will turn OFF. It may take from about 2-3 minutes after power ON until good GSP reception.

When you download data from the RC Altimeter #2 and you had RC GPS previously connected to it in the past, you will get notice that GPS data is available. You will be able to see speed graph and export GPS data to *.kml file for 3D flight view.

Figure 2 shows how to export flight from RC Altimeter #2 series when using RC GPS.

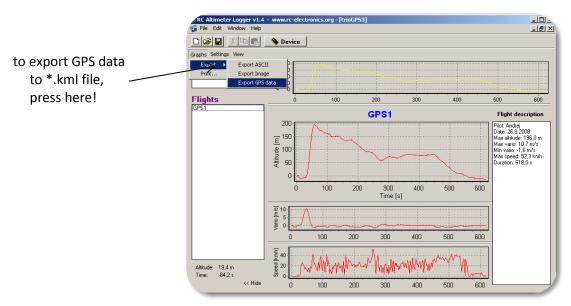


Figure 2: Speed graph.

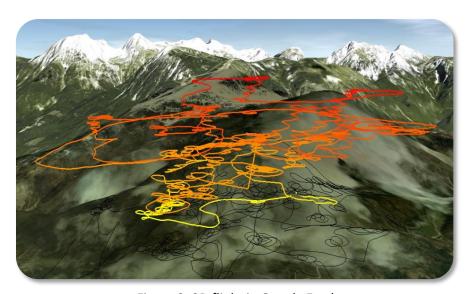


Figure 3: 3D flight in Google Earth.

Ordering information

If you would like to have RC GPS for our older systems (RC Altimeter #2 and #3 series), then you must specify this in your order, so you will receive it with 4 pin connector which older systems use.

If nothing is specified, new version with 10 pin connector will be sent!

Revision history

January 2012	Version 1.3: New GPS module with 10pin connector for RC Multi system.
--------------	---