AltusMetrum

Release Notes for Version 1.5

6 September 2014

Bdale Garbee <bdale@gag.com>

Keith Packard <keithp@keithp.com>

Copyright © 2014 Bdale Garbee and Keith Packard

This document is released under the terms of the Creative Commons ShareAlike 3.0 license.

Version 1.5 is a major release. It includes support for our new EasyMega product, new features and bug fixes in in the flight software for all our boards and the AltosUI ground station

1. AltOS

AltOS New Features

- Add support for EasyMega boards.
- Make the APRS SSID be configurable. This lets you track different rockets on the same receiver without getting things mixed up.
- Report extra pyro channel continuity state on EasyMega and TeleMega via the beeper. This lets you easily verify flight readiness on these boards after powering up the electronics on the rail.
- Add lower telemetry data rates (2400 and 9600 bps) to increase telemetry radio range. This reduces the amount of data received as well as increasing battery consumption in the transmitter.
- Change TeleGPS to have only a single log, and append new data to it rather than using seperate perflight logs. This avoids accidentally filling up log storage by turning TeleGPS on/off several times.

AltOS Fixes

- Increase the maximum range for altitude values from +/-32767m to +/-2147483647m, allowing the flight computers to function correctly above the 32km level.
- Continuously test pyro firing conditions during delay stage, inhibiting the pyro channel if the test fails. This prevents firing pyro charges where the conditions were good before the delay, but become bad before the delay expires.
- Allow negative numbers in pyro configuration values. This lets you specify things like descending speed or deceleration.

2. AltosUI and TeleGPS Applications

AltosUI and TeleGPS New Features

- Support telemetry baud rate selection. Adds menus to the flight monitoring and configuration for baud rate selection.
- Support APRS SSID configuration.
- Integrate with file managers. This provides icons for all of our file types and associates our application with the files so that using a file manager to open a AltOS data file results in launching our application.

AltosUI Fixes

- Make the *Graph* button on the landed tab work again.
- Make tests for Java on Windows a bit smarter, and also provide the user with the option to skip installing Java for cases where we just can't figure out what version is installed.