Spektrum™ Telemetry Receiver Update
AR9140T, AR12310T, AR20310T
2020- April - 6

Change Log Version 1.7.0

- When using an AS3000 gyro, if the connection is interrupted to the receiver, the pilot maintains full control and the system will disable AS3X until the connection is repaired and the system is rebooted.

- Servos now remain in their current position when shutting off the receiver when using the softswitch. This prevents the possibility of unintentionally actuating a valve/ accessory/ landing gear during shutdown.

Change Log Version 1.6.45

- Fixed a Servo jitter issue that was only seen on some servos.

Change Log Version 1.6.44

- Servos on channels 11+ now initialize at failsafe position instead of 0 which was causing issues for some models.

Change Log Version 1.6.41

- Heading/Gyro gain scaling is now being properly applied to multi servo control surfaces. This issue would have only been significant on planes with drastic differences in travel settings between servos driving the same control surface.
- The gain scaling fix mentioned above causes travel settings to now have an effect on gain values. Internal adjustments have been made to reduce the need for gain setting adjustments for users updating from 1.6.37, but it still may be required depending on the travel settings used. Always make sure you have a way to turn off gyro control while in the air in case issues arise.
- The above fix also improves effect of priority and consistently resets heading hold for all surfaces on the same axis.
- Fixed occasional inaccurate analog readings (such as battery voltage and current sensing) when the AS3000 was plugged in.
- Receivers that had been updated from 1.5 to 1.6.37 were going through Center Stick check even though they had not gone through the initial setup step. This was preventing some receivers from initializing depending on the model settings. This check is now properly ignored until Initial Setup is completed.
- Fixed other minor interface bugs related to the gyro setup procedure.

Change Log Version 1.6.37

New Features

- **Forward Programming Support**
    - Allows configuration of features directly through the transmitter interface (No phone or computer required). **Only compatible with transmitters that support forward programming. Check your radio models updates change log for support.**

    The (FWD_PGM) tag indicates which features are enabled with forward programming.

- **AS3000 AS3X Gyro and Variometer Support**
    - (FWD_PGM) AS3X Gyro stabilization can now be easily added and configured, with the addition of an AS3000 module, via a Spektrum Radio with Forward Programming.
    - (FWD_PGM) In addition to flight stabilization, there is a separate configuration for **nose wheel** stabilization to help hold heading during landing/takeoff.
    - New telemetry data access available with AS3000
        - Auto Configure Option in the Telemetry menu on compatible Spektrum Transmitters will add the following sensors for Telemetry Feedback
        - This includes sensor info for G-Force, Variometer, Altitude, and Gyroscope
- **mAh Auto Reset (FWD_PGM)**
    - For added convenience, the receiver can be taught the fully charged voltage of the receiver batteries to determine when the batteries have been charged, and automatically reset the mAh used when fully charged packs are installed.
- **Failsafe Individual Channel Setup (FWD_PGM)**
    - Failsafe settings can now be configured for individual channels.
        - This allows pilots to set some channels for Hold Last Command Failsafe, while others can be configured for a Preset Position Failsafe.
    - The preset positions can also be recaptured (no need to rebind!), or individually adjusted in the forward programming menu.
- **For more details and how tos, please visit Youtube.com/SpektrumRC and find the Forward Programming Playlist**

Initial Release Version 1.5