SPRY+ ACRO Firmware Updates

Every Spry+ firmware update is released in two versions:

- STANDARD firmware version; and
- ACRO firmware version

STANDARD firmware releases

Standard firmware provides all the features described in the Spry+ Operating Manual and is the firmware version installed on all new Spry+ drones at the factory. This firmware supports the following flight modes:

- **GPS flight mode** – safest flight mode with good GPS coverage
  - Hands-free hovering
  - Return Home
  - Follow-Me

- **Circle flight mode** – best mode for accurate photographic orbits
  - Hands-free orbiting of fixed or moving objects

- **ATTI flight mode** – for more advanced pilots
  - Height stabilization
  - High-speed flight
  - No position hold

ACRO firmware releases

ACRO firmware is designed exclusively for very experienced acrobatic pilots ONLY. Its functions are NOT described in the SPRY+ Operation Manual.

ACRO firmware significantly changes the behaviour of the SPRY+ drone.

Three flight modes are accessible from the remote controller during flight.

- **GPS flight mode** – safest flight mode with good GPS coverage. This mode is the same as the standard firmware
  - Hands-free hovering
  - Return Home
  - Follow-Me

- **BALANCED flight mode** – best mode for smooth photographic flights
    - No automatic hover
    - High speed flight and control
    - Spry+ will drift with any wind and inertia
    - Spry+ will not stop when joysticks are released
    - Spry+ will maintain aircraft attitude to prevent flipping
    - Similar to ATTI mode without height control
    - Selected by switching Flight Mode switch to **Circle** mode

- **ACRO flight mode** – for **VERY ADVANCED PILOTS ONLY**
  In this mode, the aircraft's gyroscopes, GPS, barometers and other sensors are not used to stabilize flight. The aircraft is in full manual control. Flight speed and flight attitude are directly controller by the pilot. In this mode, the aircraft will not hover unless the pilot maintains a balanced throttle. Flight speed will be particularly fast. The drone can do a variety of flips, including on the surface of the water and other acrobatic actions.
    - Acrobatic mode
    - No stability management, drone can be flipped in any direction
    - No hover, position or orientation hold
    - Maximum-speed flight
    - Direct pilot control of all drone functions
    - Warranty does NOT cover flights in ACRO mode!
    - Selected by switching Flight Mode switch to **ATTI** mode

FLIGHT NOTES for ACRO Flight Mode

1. Flights in ACRO mode are not covered by warranty, regardless of the cause of damage.
2. Pilots must be experienced and exercise extreme caution when choosing ACRO mode.
3. Always seek training before flying in ACRO mode.
4. It is best to practice ACRO flying over water where you can retrieve the drone if necessary.
5. Do not fly in ACRO mode near people
6. Always be prepared to quickly change to BALANCED or GPS Flight Mode to stabilise the drone.
7. After flying in ACRO mode, always switch to BALANCED Flight Mode for at least **30 seconds** before engaging GPS Flight Mode.
8. If the remote controller loses signal to the aircraft in ACRO or Balance mode, it is recommended to immediately return to GPS mode so that when control is regained, the aircraft will hover.

Flight Skills for ACRO flight mode

1. The Spry+ is waterproof, but it is not designed to be crashed into the water. Flying or performing tricks which result in the drone dropping into the water from higher than a few meters will damage the drone or smash the glass dome and allow ingress of water and complete failure of the electronics which is not covered by warranty.

2. Intense flying in ACRO flight mode or a crash into the water can temporarily affect the accuracy of the gyroscope. After flying intensively or performing acrobatics in Balanced or ACRO mode, for best results fly in a stable manner for 3-5 seconds before engaging GPS mode to allow the gyroscope to stabilize. If the aircraft remains unstable in GPS mode:

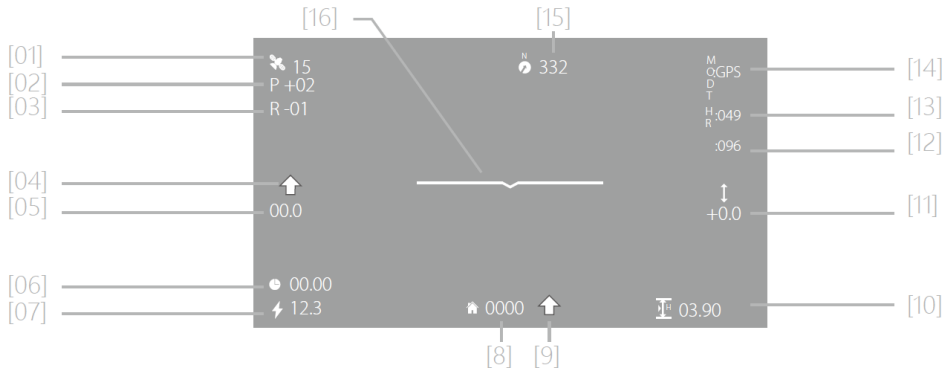
    • return to Balanced mode

    • land the aircraft

    • Switch the aircraft OFF then ON again

    • Perform the gyroscope calibration twice

3. When flying in ACRO or Balanced mode, if you need to stabilize the flight of the aircraft or lose your sense of the aircraft's direction, switch to GPS mode to hover the aircraft and regain control.
4. To determine the orientation of the aircraft to the pilot, learn to use the two direction icons on the remote controller display. When the two arrows [4] and [9] are pointing in the same direction, the nose of the drone is facing the pilot.



Alternatively, you can activate the automatic return mode to re-orient the drone to face the Home point. Press and briefly hold the Return Home switch on the remote controller. The drone will rise up to 30 meters and then turn to face the pilot before starting its return flight. At this time, the return mode can be cancelled by pressing and holding the Return Home key again.

5. The effective control distance of the aircraft over water is directly related to the altitude of the remote controller. The higher the remote controller is above the water surface, the further the control distance. As an example, with the remote controller 2.5 meters above the water, the effective control distance will be approximately 250 meters.
6. As the flight mode switch on the remote controller changes functions with ACRO firmware, it is recommended to affix labels to the remote controller to ensure that the correct flight mode is used.