

To:
ACSL SOTEN owners

January 16, 2025

Service Letter ACSL-SOTEN-SB24-018

ACSL TAKEOFF for SOTEN

Version 1.16.0 Release Notes

Thank you for your continued use of ACSL SOTEN. On December 19, 2024, ACSL TAKEOFF for SOTEN version 1.16.0 was released with the improvements described in this document. Please read this document thoroughly and then follow the instructions in the TAKEOFF User Manual to update ACSL TAKEOFF on your devices and the firmware of your ACSL SOTEN aircraft and accessories.

The ACSL TAKEOFF for SOTEN ground control application version 1.16.0 includes SOTEN aircraft (Nx) firmware version 1.2.10, CX-GB100, CX-GB300, and CX-GB400 camera firmware version 1.20, and CX-GB200 camera firmware version 1.21. When the SOTEN aircraft is successfully updated, the "System Information" tab in the "Settings" view of the TAKEOFF application should indicate "Nx 1.2.10" as shown in Figure 1.

If updating from TAKEOFF v1.13.6 or earlier, updating to this version of TAKEOFF will include an over-the-air update of the SOTEN aircraft, standard controller, cameras, and battery. If updating from TAKEOFF v1.14.4, there will not be any update of the standard controller and battery.

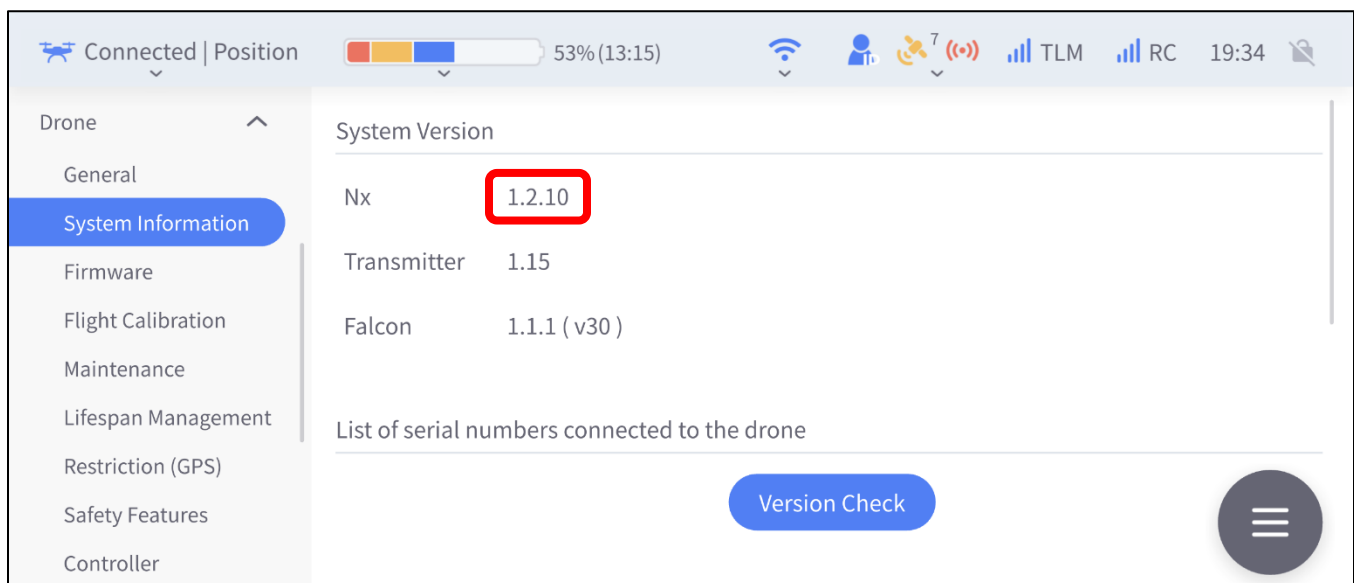


Figure 1. ACSL TAKEOFF ground control application "System Information" tab.
*Note that "Falcon 1.0.9" may be displayed without any change in functionality.

Ensure aircraft battery and controller are fully charged before starting the firmware update.

If 'BATTERY FIRMWARE OLD' appears on the controller's LCD during the SOTEN firmware update, the battery firmware will update automatically after the aircraft firmware is successfully updated and the aircraft is powered on again.

Major Firmware Updates

1. Enhanced Video Quality

Several improvements have been implemented to improve the camera vibration resistance and overall quality for the real-time video stream and recorded footage.

2. Optimized Electronic Image Stabilization (EIS) for Upper Camera Mount*

The accuracy of electronic image stabilization (EIS) has been enhanced when using the CX-GB400 optical zoom camera on the upper camera mount.

*Note: This update applies exclusively to the CX-GB400 optical zoom camera. The same improvement for the CX-GB100 standard camera was implemented in a previous version of TAKEOFF.

3. Refined "Navigation Calc. Error" Trigger

The detection criteria for the "Navigation calc. error" notification have been refined to reduce unnecessary alerts that do not impact aircraft performance.

Precautions

When updating using the ACSL TENS0 controller, **be sure to remove the SD card from the TENS0**, uninstall the TAKEOFF app before installing the latest TAKEOFF app, then perform the aircraft firmware update procedure.

When the SOTEN aircraft is updated with the firmware that is included with this version of TAKEOFF **some of the aircraft settings will be automatically reset to their default values**. Any previous changes to those aircraft settings will not be retained. If you wish to keep the current settings, make a record of the settings prior to the update and reenter those settings after the update. The settings that will be reset are summarized in the screenshots below.

- Restrictions (GPS) settings will reset those shown in Figure 2.

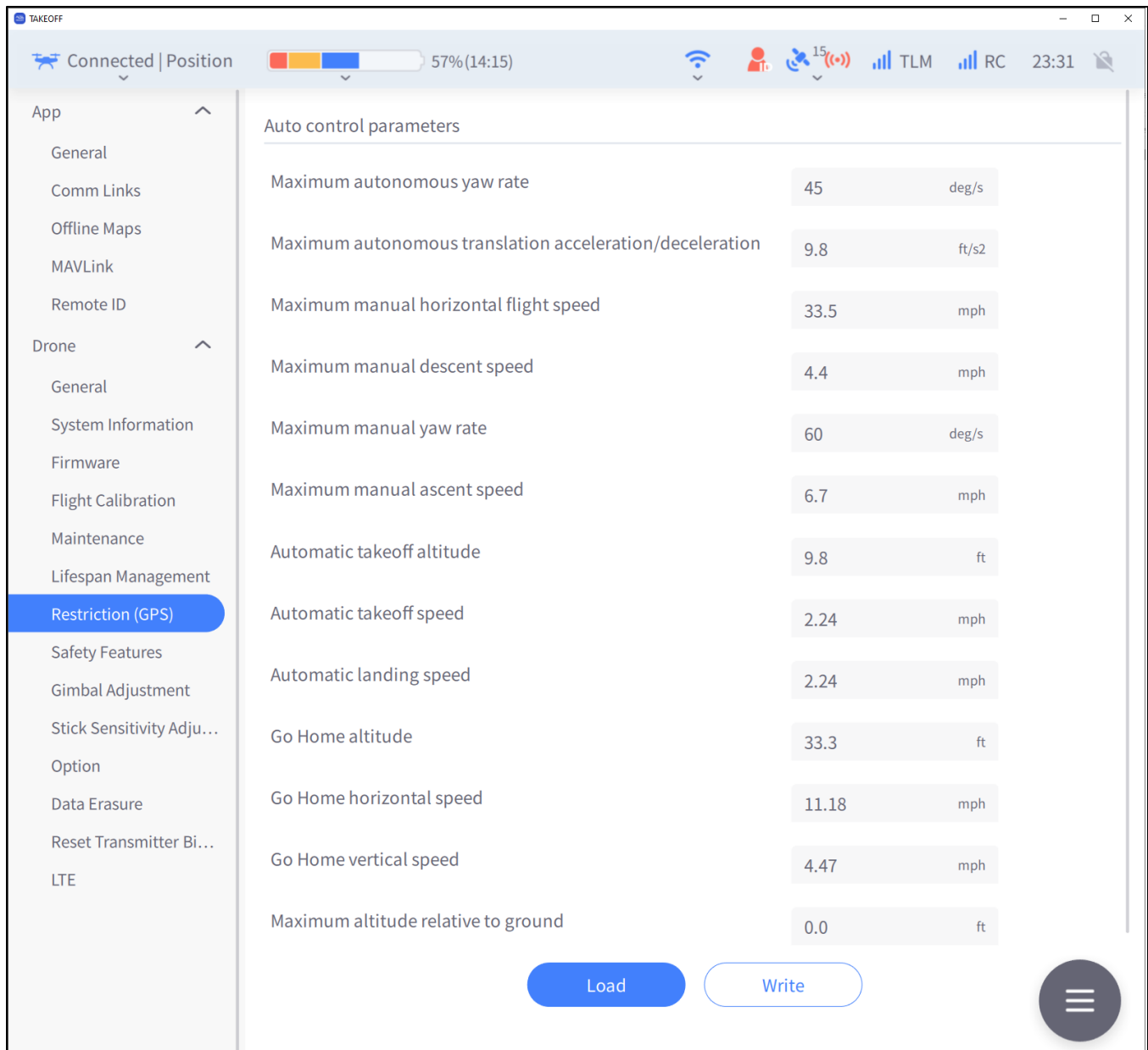


Figure 2. The Restrictions (GPS) default settings.

- The Safety Features settings will reset to those shown in Figure 3.

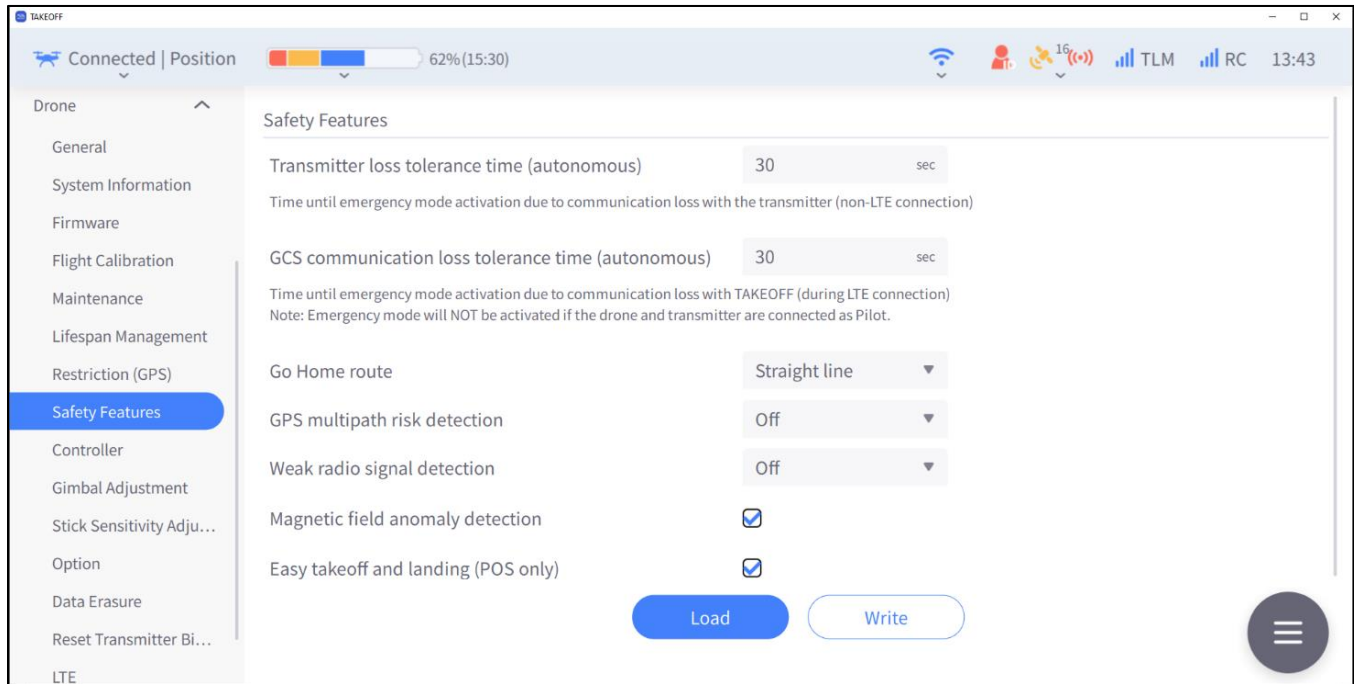


Figure 3. The Safety Features default settings.

- The Gimbal Adjustment settings will reset to those shown in Figure 4.

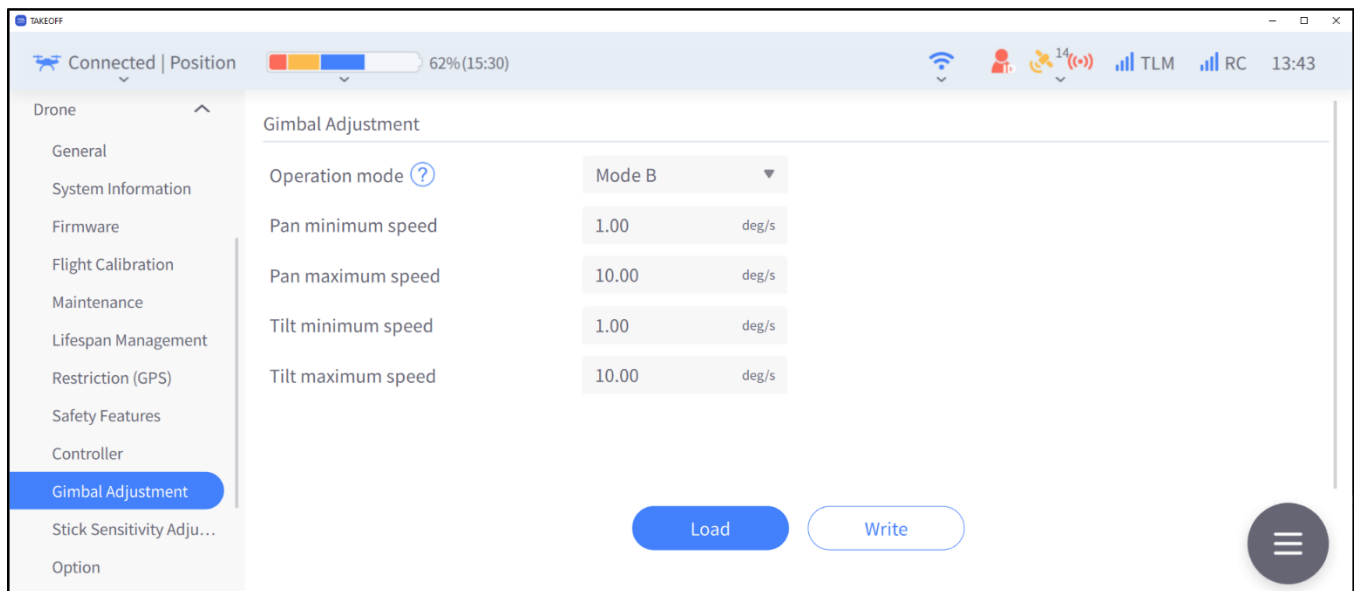


Figure 4. The Gimbal Adjustment default settings.

- The Stick Sensitivity settings will reset to those shown in Figure 5.

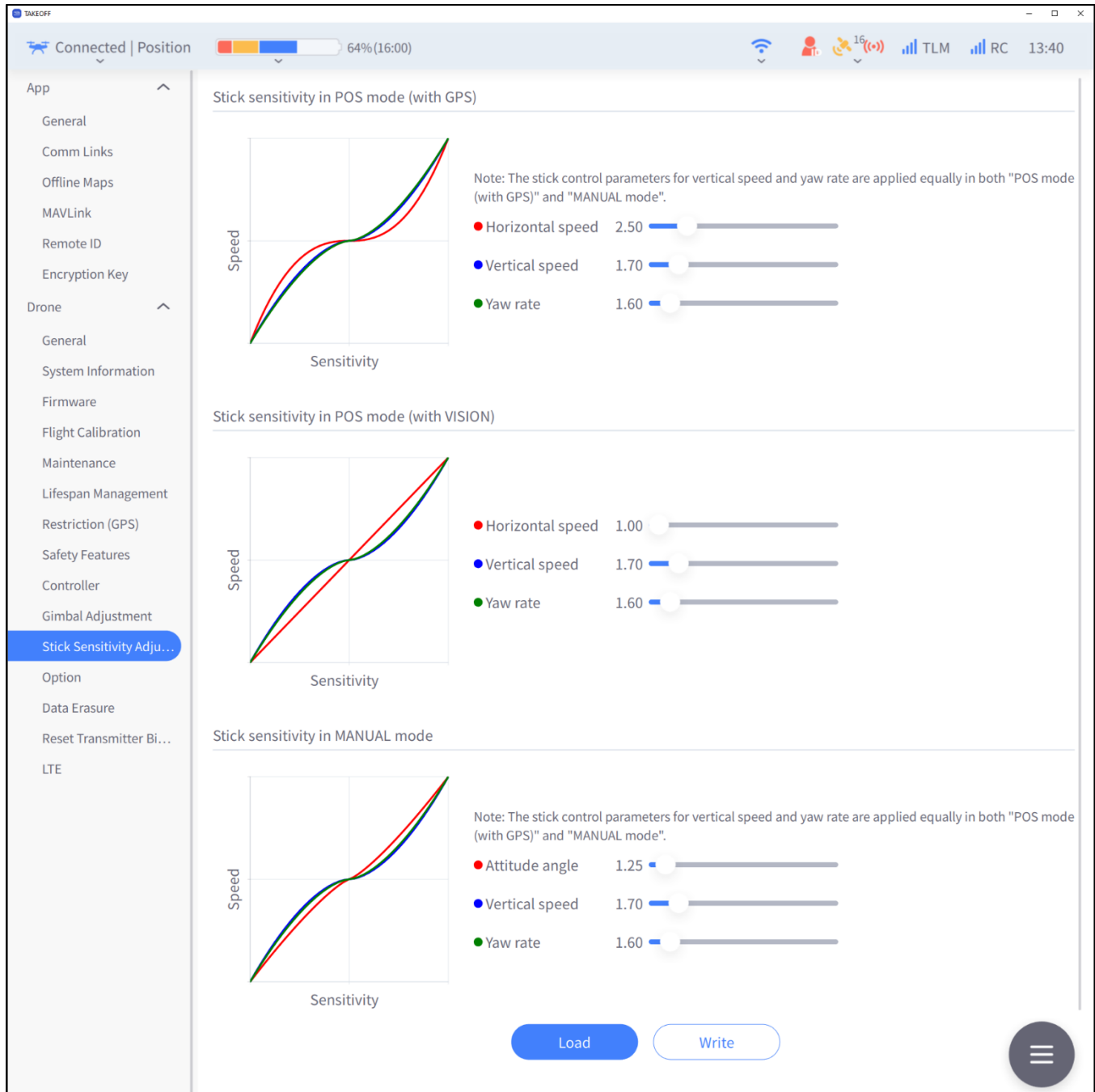


Figure 5. The Stick Sensitivity default settings

- The Option settings will reset to those shown in Figure 6.

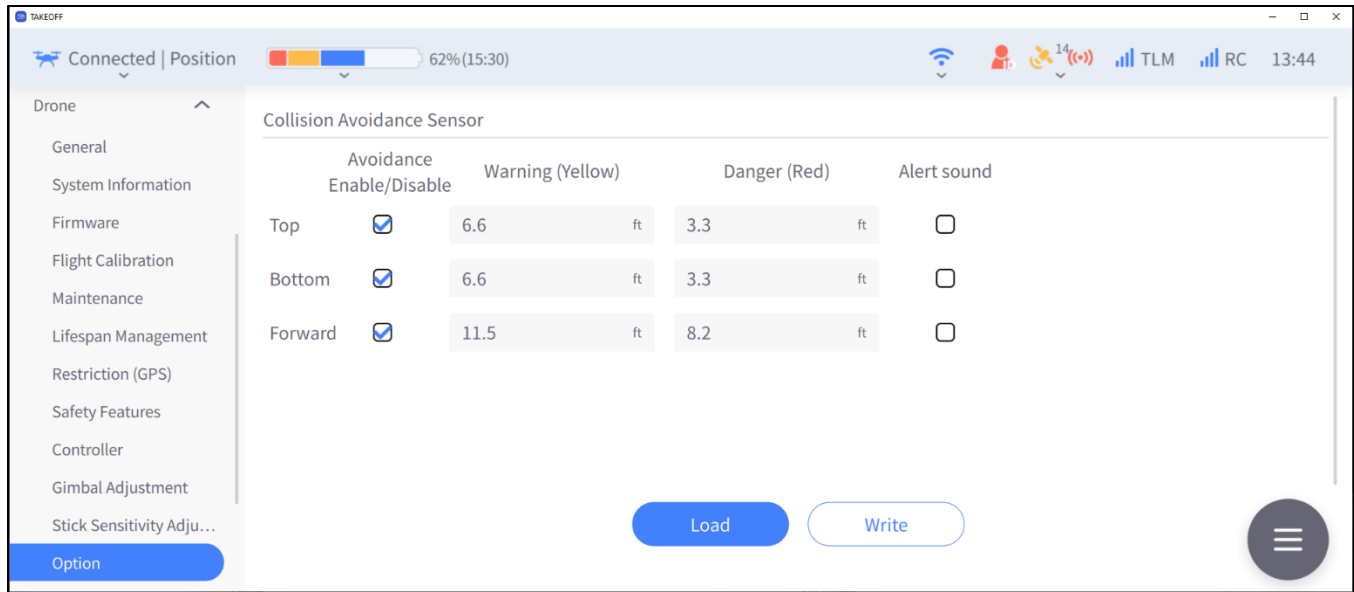


Figure 6. The Option default settings.

Note that this update can be performed from any previous version and all updates from all previous versions will be included in the update.

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