

Instruction how to increase the battery life of the Pilotfly-H1+

The battery life of the gimbal is depending on the camera configuration. The average battery life is 1 - 2.5h. With the following instruction you might be able to increase the battery life by ensuring the correct battery calibration in the SimpleBGC GUI.

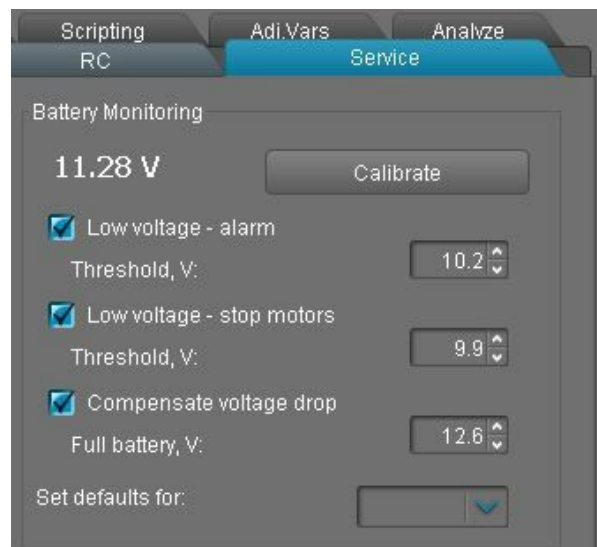
On all 32-bit boards there is a voltage sensor to monitor the main battery voltage. It is used to apply voltage drop compensation (to ensure PID's remain stable during the full battery life cycle), and to provide power for low-voltage alarms and perform motor cut-off when the battery becomes discharged.

There are two options to set the correct battery voltage.

Follow the instruction below to increase your battery life up to 20%. Wrong battery calibration could cause low battery life of the system.

Option A (with mulimeter):

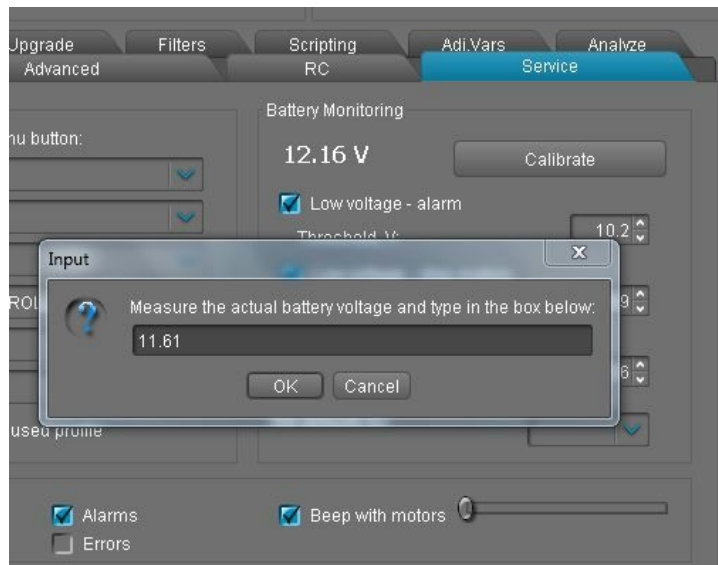
1. Calibrate - adjust the rate of the internal multiplier to make the measured voltage more precise. You need a multimeter to measure the real voltage of the battery. Measure it on the DC input of the gimbal as shown below.



NOTE: Power off the motors while measuring the battery voltage.

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- Then enter the measured value in the calibration dialog, on our example it is 11.61V.



- Set the **Low voltage - alarm** threshold, the **Low voltage - stop motors** and the **Compensate voltage drop** to the below mentioned values.

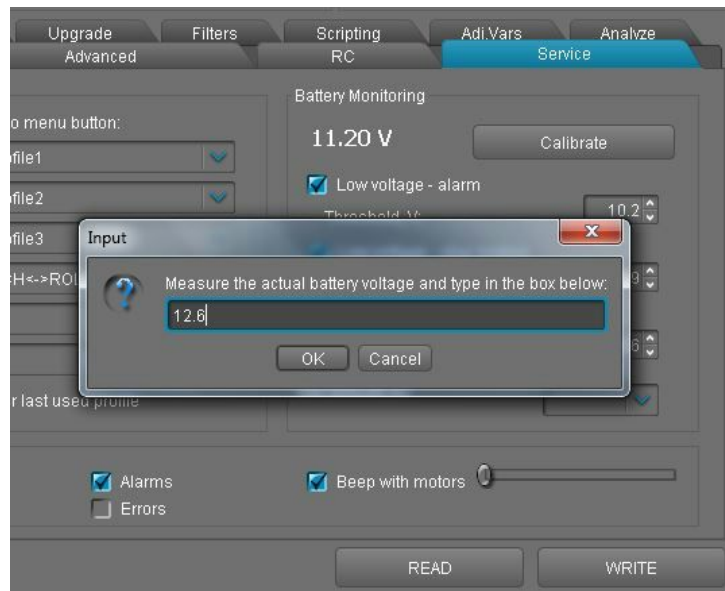


- Press "WRITE" to save the value to the gimbal. --DONE--.

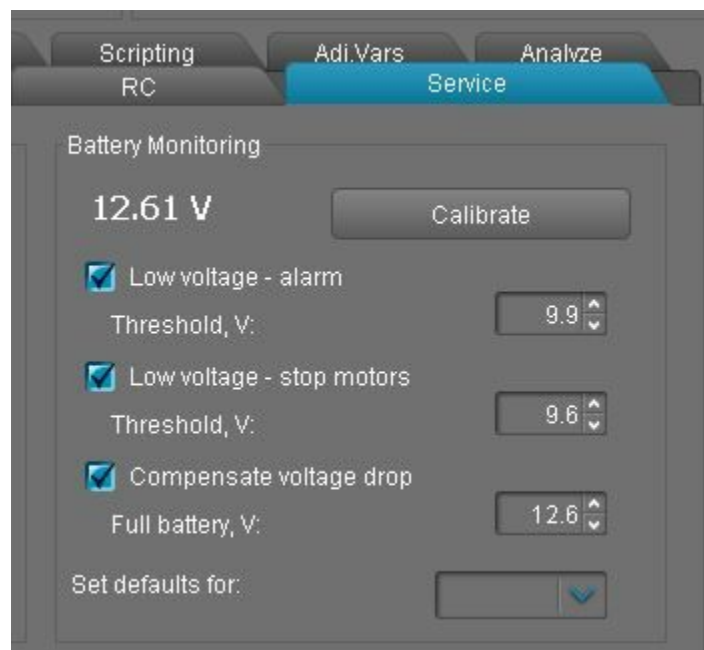
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Option B (without mulimeter):

1. Ensure that the battery is fully charged (Green LED on power adapter). The battery capacity in fully charged condition has **12.6V**.
2. Then enter the value 12.6V in the calibration dialog.



3. Set the **Low voltage - alarm** thershold, the **Low voltage - stop motors** and the **Compensate voltage drop** to the below mentioned values.



4. Press "WRITE" to save the value to the gimbal. --DONE--.

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