



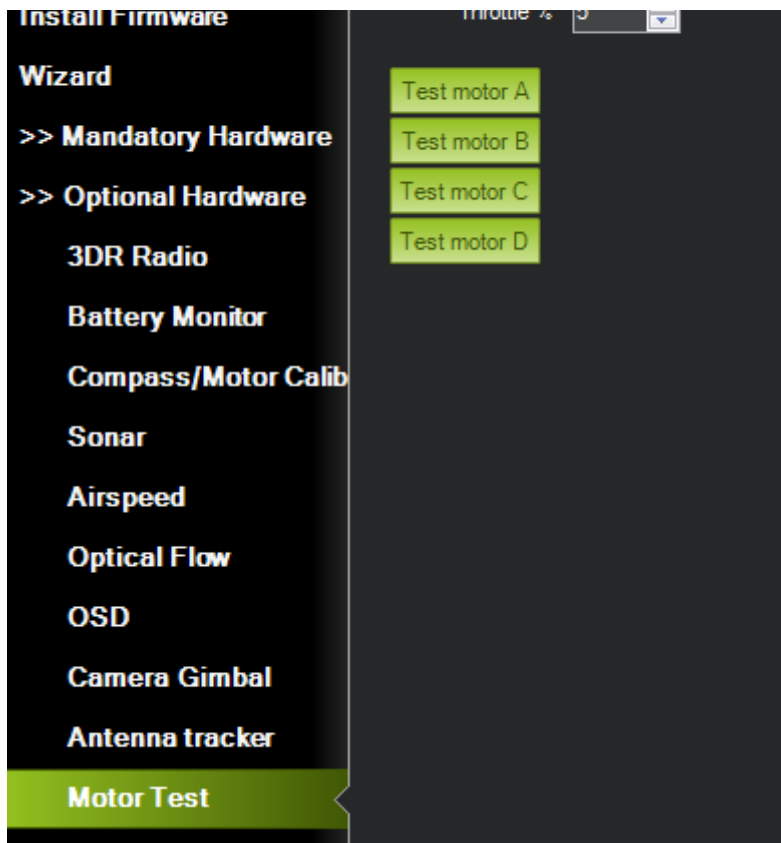
ESC . , - .

, ** *

ESC



-
- LiPo
- USB



- Press "Throttle %" button, then press "Test motor" button, then observe the ESC's behavior. If the ESC's behavior is normal, then the deadzone is 1%~2%. If the ESC's behavior is abnormal, then the deadzone is more than 2%.



Press the "Throttle %" button, then press the "Test motor" button, then observe the ESC's behavior. If the ESC's behavior is normal, then the deadzone is 1%~2%. If the ESC's behavior is abnormal, then the deadzone is more than 2%.

شيء مهم

• **MOT SPIN MIN** parameter.

- set the **MOT_SPIN_ARM** ** parameter to ***(the percentage discovered above + 2%) / 100**. I.e. if you found the deadzone of the ESCs was 7%, set **MOT_SPIN_ARM** ** to 0.09 (i.e (7 + 2) / 100).
- set the **MOT_SPIN_MIN** ** parameter to at least 0.03 higher than **MOT_SPIN_ARM** **. I.e. if **MOT_SPIN_ARM** ** was 0.09, set **MOT_SPIN_MIN** ** to 0.12.

Setting **MOT_SPIN_MIN** even higher than recommended above is acceptable if we want to account for voltage drop of the battery, but setting it too high reduces the lower range of the motors which reduces control which could be important, especially on powerful copters with a low hover throttle.



The **MOT_SPIN_MAX** parameter to account for the very top of the ESC/motor range which generally produces no additional thrust. By default this value is 0.95 (i.e. top 5% of the range produces no additional thrust).

if ESC RPM telemetry is being used, the **TKOFF_RPM_MIN** parameter could be set slightly below the ****MOT_SPIN_ARM **** parameter to prevent takeoff attempts, and subsequent flips on takeoff, if one or more motors are not spinning.

IDLE State Time

If needed, you can add delay between the time the motor idle state is reached and when increased throttle can be applied to the ESCs using the **MOT_IDLE_SEC** parameter (default is 0 seconds).

ArduPilot Copter · Setting Motor Range · CC BY-SA 3.0

□□□ #2

Admin 2026-10-09 14:41:08 UTC

Admin 2026-10-10 01:45:56 UTC