

This little 99mm diagonal quad was built using Eachine 1104 4000kv motors, Multistar 6A esc's, H8 mini green FC (cut down), RX2535 props, 450mAh 3S Nanotech battery and a 99mm frame from Armattan Productions. It weighs 46.9gm and the battery is 40.0gm, AUW is 86.9gm.



Some of the firmware settings are - gyro lpf 42Hz, soft lpf none, throttle reduction 30%, motor min 0.07 for 3S, motor filter on, PWM 8kHz. One of the esc's has a 5V BEC and that powers the FC.

The current PID's are:

```
float pidkp[PIDNUMBER] = { 6.3e-2 , 6.3e-2 , 2.6e-1 };
float pidki[PIDNUMBER] = { 1.8e-1 , 1.8e-1 , 1.0e-1 };
float pidkd[PIDNUMBER] = { 2.9e-1 , 2.9e-1 , 1.4e-1 };
```



This next quad was built using a GW008 (skull drone) FC with CG023 firmware, buck regulator from Banggood, DYS 1306 4000kv motors, Gemfan 3545 props, XM10A escs, 450mAh 3S Nanotech battery and a 141mm frame from Armattan Productions (search 141mm to find it). It weighs 99.9gm and the battery is 40.7gm, AUW is 140.6gm. The other battery I use is an 850mAh 3S weighing 71.5gm, AUW 171.4gm.



Some of the firmware settings are - gyro lpf 41Hz, soft lpf 2nd 88Hz, motor filter on, PPM ESC freq 400Hz, HW I2C speed fast, motor min 0.12.

The current PID's for 3S (tuning is still in progress):

```
float pidkp[PIDNUMBER] = { 4.2e-2 , 4.2e-2 , 2.0e-1 };
float pidki[PIDNUMBER] = { 1.7e-1 , 1.7e-1 , 0.9e-1 };
float pidkd[PIDNUMBER] = { 5.0e-1 , 5.0e-1 , 2.0e-1 };
```

The current PID's for 2S (tuning is still in progress):

```
float pidkp[PIDNUMBER] = { 4.7e-2 , 4.7e-2 , 2.5e-1 };
float pidki[PIDNUMBER] = { 2.4e-1 , 2.4e-1 , 1.2e-1 };
float pidkd[PIDNUMBER] = { 5.5e-1 , 5.5e-1 , 2.5e-1 };
```



From: <http://sirdomsen.diskstation.me/dokuwiki/> - Silverware Wiki

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