

KK Multicontroller Pre Flight Checklist

ADJUSTING:

Transmitter throttle adjusting:

- Turn on transmitter and flight controller.
- If led does not turn on and stays on, lower your trim.
- If still no go, you may need to reverse the throttle channel.
- On Tri v1.5 Quad v4.5 firmware above, you need to Arm your board by putting the left stick down and to the right for the LED to come on. If this does not happen, adjust your throttle and yaw trim down and to the right on your transmitter.

Initial transmitter ATV/servo range settings:

- pitch (elevator): 50%
- roll (aileron): 50%
- yaw (rudder): 100%

Initial gain pot values is 50%. Increase until it starts to oscillate rapidly, then back of until it is stable again. Fast forward flight needs lower gain.

Too low gain is recognized by hard to control and/or always want to tip over.

ESC throttle range:

- Turn yaw pot to zero.
- Turn on transmitter.
- Throttle stick to full.
- Turn on flight controller.
- Wait until the ESC's beeps twice after the initial beeps. (Plush and SS ESC's)
- Throttle stick to off. ESC's beep.
- Turn off flight controller.
- Restore the yaw pot.

Checking transmitter channels:

- Take off the propellers.
- Turn on transmitter and flight controller.
- Set throttle to about 1/4. Motors should start.
- Move pitch (elevator) stick forward. Back motor should speed up. If not, reverse pitch (elevator) channel.
- Move roll (aileron) stick to the left. Right motor should speed up. If not, reverse roll (aileron) channel.
- Move yaw (rudder) stick to the left. Front and back motor should speed up. If not, reverse yaw (rudder) channel.

Checking gyro directions:

- Take off the propellers.
- Turn on transmitter and flight controller.
- Set throttle to about 1/4. Motors should start.
- Tilt quad forward. Forward motor should speed up. If not, reverse pitch gyro.
- Tilt quad to the left. Left motor should speed up. If not, reverse roll gyro.
- turn quad CW. Front and back motor should speed up. If not, reverse yaw gyro.

Reversing gyros:

- 1: Set roll gain pot to zero.
- 2: Turn on flight controller.
- 3: LED flashes rapidly 10 times.
- 4: Move the stick for the gyro you want to reverse.
- 5: LED will blink continually.
- 6: Turn off flight controller.
- 7: If there is more gyros to be reversed, goto step 2, else set roll gain pot back.

Final check:

Hold the quad firmly over our head, give about 1/2 throttle slowly. Hold it steady when you start increasing the throttle, because it calibrates its gyros when throttle leaves zero, and then the gyros need to be at rest.

If it tries to twist away, check propeller and motor directions, gyro placement and trim settings. A slight twist is OK.

If not, try to twist the quad. It should resist your movements. And also more gain gives more resistance. If it starts to oscillate, reduce the gain. If you need to reduce the gain below 40%, something might be wrong.

Note: the correct procedure for taking off from the ground is as following:

- 1: The quad and its propellers needs to be motionless.
- 2: Increase the throttle (collective). Just as the throttle leaves zero, gyro calibration is performed.
- 3: Enjoy! And remember to close the throttle if you lose control. Much less damage.

NOTES:

- Do not use bigger propellers than you need. Light propellers gives faster response and more stability.
- Try to get it to hover at about midstick (1/3 to 2/3 throttle). Use smaller/bigger propeller, different motor Kv or more/less cells to achieve that.