

BSA Alpha Pilot

FAQ & Troubleshooting Guide

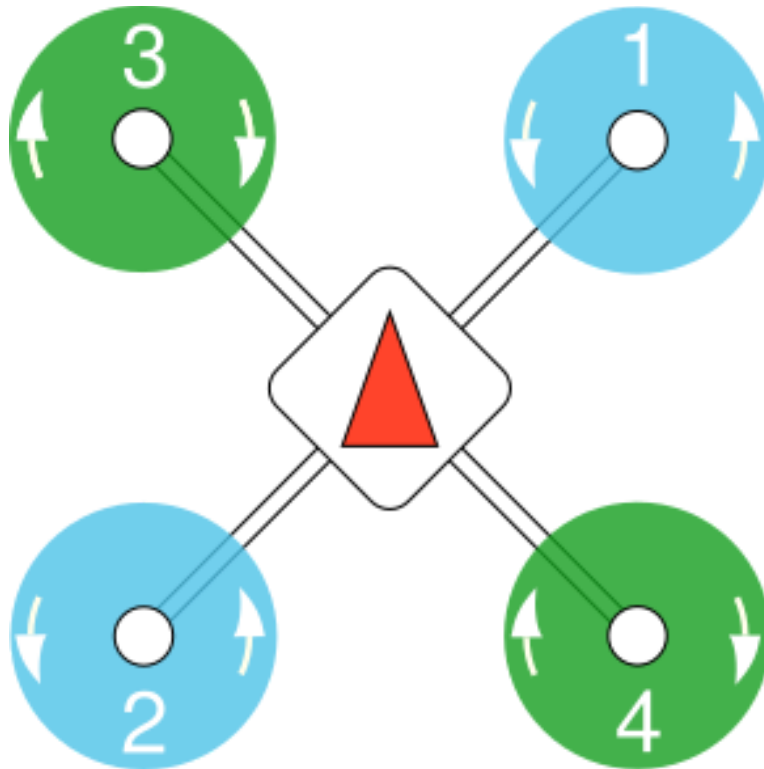
This Guide will be updated throughout the Alpha Pilot as questions come in and problems are resolved. Please check this file for help first, and then, if you don't find the information you need, please contact the help line at: (512) 829-8465

Assembly

1. Just before you put the final A-plate" on top of your drone, it is recommended you hook up the battery and go through the **Motor Rotation Check** procedure following the instructions in the Introduction to the **Flight Controller Guide** to make sure you have all your motors plugged into the right port on the FMU and they all spin correctly. It is easier to do at this point than when you first try to fly your drone.
2. When building the arm-leg combinations, it helps to mark each leg with a number 1, 2, 3, or 4 reflecting the position on the drone for that leg. People have made simple mistakes and put the arm-legs on incorrectly.
3. Prior to putting Plate A on the top of the drone, make sure that ALL wires are well away from any of the ribs which can pinch or cut wires if they get in-between the top plate and the ribs.

First Flights

1. Reminder: try to do your first few flights on a soft surface, such as grass, sand or similar surfaces. Try to avoid taking off and landing from hard surfaces as the crash damage will be greater. Once you are feeling comfortable flying the drone - then you can proceed to flying from hard surfaces.
2. I can't get the app on my phone to connect to the drone. Make sure that you have fully exited the app on your phone - and it is turned off before you link your phone to the ardupilot wifi host on the drone. Then bring up the QGC app on your phone and it should find the connection.
3. My joysticks on the RC Controller don't seem to be working. Make sure you have gone through the RC Radio calibration procedure in the **Flight Controller Guide** before your first flight or anytime you see this issue.
4. I started up my drone and tried to take off and one or more of my propellers flew off. This can be caused by one of several issues:
 - a. Verify that the motors/ESC's are plugged into the right FMU port using the **Motor Rotation Check** procedure.
 - b. Verify the motor rotation directions using the **Motor Rotation Check** procedure. If any motor spins in the wrong direction as shown below, then swap the red & blue wires for that motor to ESC connection so that you have red connected to blue and blue connected to red.
 - c. If the two above steps do not resolve the problem, verify the direction your propeller turns - sometimes you can cross-thread a propeller by forcing it onto the wrong motor. If you suspect that has happened, switch to one of your spare propellers.



5. My phone keeps flashing a warning that it cannot connect to the internet through the network ardupilot. If your phone asks if you want to switch to radio mode, select the “keep trying internet” option and ignore it. Your phone does not understand that this is a “private” WiFi channel, and is trying to get to the internet via this channel. That is not needed to fly.
6. My App screens don't show everything and seem to be zoomed out. This is typically an iPhone setting. Go to Settings/Display & Brightness/ and set the display zoom to “normal”.
7. I am trying to run the **Motor Rotation Check** procedure and get an error message stating “Motor test command denied”. You must first arm your drone using the arm switch on the drone and then the arm slider on the app before you can run this procedure.
8. I am getting an error message when I try to arm my drone using the arm/disarm slider on the app. It says “press the safety switch first” That is referring to the arm button on the top of your drone.
9. I am trying to calibrate the accelerometers on my drone. The instructions tell me to hold it perfectly still with the left and then the right side held downward. I can't hold it perfectly still. For the accelerometer calibration only, it is OK to rotate the propellers so that they are parallel to the surface you are using, and set the drone on its side and let it tilt over a bit to do these steps. A couple of books or other flt objects may be put under the body to hold it upright.
10. When I start to take off, not all of my propellers start at the same time. This is normal for the general QGC app. The BSA app will be better tuned so that this does not affect takeoff.
11. I try to disarm my drone using the on-screen arm/disarm sliders, but they are very sensitive and don't always seem to work. The QGC sliders are overly sensitive. Move your finger slowly and stop at the end of the slider, don't go over the end. Also, remember that you can easily use the Channel 8 kill switch on the back side of your RC controller to disarm your drone.