

## Alta X Troubleshooting

Within the document you may add the issue and more importantly the solution.

If you do not see your issue within this please contact your regional specialist. They may instruct you to contact [support@droneamplified.com](mailto:support@droneamplified.com) to assist. Please allow at least 48 hours for a response and understand they work Monday-Friday 08:00-17:00 central time or eastern time depending on your issue.

### Aircraft

- Issue: Alta continued to drift rolling right uncontrollably
  - Recalibration of NW Blue using Union Robotics -> Link on workshop references website
  - Recalibration using QGroundControl (Do Not go to corners just the 90°s the system will arm)
- Accelerometer Error
  - QGroundControl -> Vehicle Setup -> Sensors -> Accelerometer (follow instruction) autopilot orientation -> Rotate yaw 180
  - Accelerometer within .7 Gyro within .25
- Compass Calibration
  - Use Ignis App
  - QGroundControl -> Vehicle Setup -> Sensor -> Compass (follow instructions) Autopilot orientation -> Rotate yaw 180 (Compass orientation 0 yaw or none)
- Diagnostics Error Not Disarming! Not yet in manual Mode or Landing
  - Disarm gesture was made during flight (down and left)
- Boom Lighting shorting out and/or breaking
  - Electrical tape
  - Glue back on using...Freefly will give us guidance
- Alta X Motor 1 error, This is a known error within Freefly & Drone Amplified
  - The following message can be displayed either in the diagnostics tab within the Ignis App, or when flight logs are pulled. This error can occur at various times and has been considered as a false reading, only if motor 1 is spinning. If Motor 1 is not operating correctly then the reading is correct and further action is warranted.
    - Motor 1 Overtemp!
    - Motor 1 Throttle Lost!
    - Motor 1 Overcurrent!
    - Motor 1 High Voltage
- Aircraft beeping one per second after flight logs are pulled.
  - Issue:
    - When we plugged the aircraft back in with battery power for an operational flight, the aircraft started beeping a higher pitch abnormal sequence of approximately one beep per second. We believe the lights were flashing blue. We tried to unplug the aircraft from battery power, plug the tablet back in while holding the (MSC) button and get it to appear as SD. This failed. The system is stuck in the reboot phase and needs to be reset.

Last Update: 5/1/2024

- Solution:
  - We then plugged the batteries in, then plugged in the tablet while holding down the (MSC) button. After about 5-7 seconds the aircraft stopped the beeping sequence and projected the regular boot tone that the aircraft makes when turning on. We then shut down the aircraft, tablet and controller, re-started, and the aircraft functioned properly.

## Ground Control Station

- Pairing GCS to Air Unit
  - Swipe Down to Union Robotics Settings
  - Radio Tab -> Pair -> Tap Pair button and then hold Pair/Reset button on Air Unit until LED2 Blinks. Pairing Successful will appear when successful.

## Batteries

- Issue: Battery lights showing Red and White (Battery Warning Error)
  - Brought to storage mode and back to full charged
  - Changed to Tattu specific balance cables provided
  - Attached to aircraft and completed mission (effectively discharging the battery)
  - Cooled and/or warmed the battery back to manufacturer recommended temperatures
- Issue: battery pack not keeping controller charged.
  - Cause: using low quality cables.
  - Remedy: utilize high amp rapid charging cable.

## Camera

- Issue: Fuzzy blurry camera
  - stopped recording and the picture cleared up.
- Issue: IR camera continued to "washout" changed the NUC
  - Advanced Menu
  - Thermal Camera
  - Correction NUC Period (1 min)
    - Temperature Atmospheric set to the current ambient air
- a.
- Issue: camera feed frozen on tablet while going through pre-flight.
  - Potential cause: changing from fly screen back to menu screen while camera is booting up.
  - Prevention: wait for the camera to boot up fully before changing between screens.
  - Fix: if the app camera feed is frozen and the camera feed is good on the controller, close the app and reopen.
- Gimbal (Pixy U) Calibration

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- With power off, you want to be able to move the camera with your hand and it stays in whatever position you put it in. After it is statically balanced there is a program called G Tune that Gremsy makes where you can adjust the gimbal parameters.
- Gremsy gimbals, the newer ones are not as good. Simply aren't as stable no matter how much you tune them.