**CLOUDMAP IRIS+**

**Before flight:**

1. Make sure computer time is accurate.
2. Check copter battery.
3. Connect copter to Mission Planner.
4. Turn on transmitter.
5. Turn off safety switch on copter.
6. Make sure transmitter landing options are off.
7. Make sure transmitter is in “Loiter” mode.

**How to connect:**

1. Make sure the number is 57600.
2. Set the connection to COM#.
   1. To connect the copter to the tablet directly, set the connection to COMUSB.
3. Click “connect”.

**How to download flight logs:**

1. At the top of the screen, open “Flight Data”.
2. At the bottom of the screen, open “DataFlash Logs”.
3. Make sure the copter is connected to the tablet via USB.
4. Click “Download DataFlash Logs via Mavlink”.
5. Check mark the logs you want to download.
6. Click “Download These Logs”.
7. After the files are downloaded, click “Create Matlab File”.
8. Select desired “.BIN” files based on date.
9. Wait for Mission Planner to convert the files.
10. Place files on flash drive and use laptop to upload to Github and run .mat files.

**How to program flights:**

1. At the top of the screen, open “Flight Plan”.
2. Click “Home Location” (make sure copter is connected first and has >6 satellites).
3. Move curser inside white dashed circle until it turns red.
4. Double click to open command options.
5. To takeoff: “Takeoff”.
6. To land: “Land”.
7. To hover at one place: “Loiter”>”Forever” / “Time”.
8. To stop at a certain altitude: “Insert WP”.
9. To rotate: “Condition\_Yaw”.
10. Make sure that all commands have latitude/longitude (except “Takeoff” and “Condition Yaw”).
11. To send the plan to the copter, click “Write WPs”.
12. To open a saved plan, click “Load WP File”.
13. To save a new plan, click “Save WP File”.
14. To reopen the last plan, click “Read WPs”.
15. Unless you make sure to “Write WPs”, if switched into auto mode the copter will start doing the last plan that was loaded.

**How to auto-launch:**

1. At the top of the screen, open “Flight Data”.
2. At the bottom of the screen, open “Actions”.
3. Make sure you have a plan loaded into “Actions”.
4. Click “Arm/Disarm”.
5. Click “Do Action” to casue the copter to take off.

**How to calibrate the accelerometers:**

**How to calibrate the compass:**

**What errors to worry about:**

1. ERROR POS VERT VARIANCE
   1. To fix: recalibrate accelerometers.
2. BAD AHRS
   1. To fix: recalibrate compass and accelerometers.
3. COMPASS VARIANCE
   1. To fix: recalibrate compass or it will resolve itself.
4. BAD GYRO HEALTH
   1. To fix: recalibrate accelerometers.
5. ACCELEROMETER ERROR
   1. To fix: recalibrate accelerometers.

**What errors that normally resolve themselves:**

1. THROTTLE BELOW FAILSAFE
2. NEED 3D FIX
3. EKF VARIANCE
4. EKF COMPASS VARIANCE
5. NUMSATS 5, NEED 6 (still getting satellites)
6. GPS ERROR