

Summary Flight Procedure: Matrix

UAS

1. Turn on RC Transmitter
2. Ensure proper UAS model is selected
3. TX switches forward (if applicable)
4. TX throttle down
5. Plug in battery to UAS
6. Check roll, pitch, yaw response to movement on Mission Planner
7. Check mode change switch if applicable (loiter, stabilize, auto, etc..)

Camera

9. Install battery in Camera
10. Install SD card in Camera
11. Turn on Camera
12. Photograph GPS time on Mission Planner display
13. Set manual focus against target to >40m
14. Set white balance with the gray card
15. Check Battery Level
16. Check SD card Capacity
17. Mount Camera on Gimbal
18. Clean lens

Gimbal

19. Check Gimbal Balance; check for neutral
20. Plug in Gimbal Battery (if applicable) WAIT 10 seconds

Video

21. Turn on real time feed monitor
22. Plug in video TX and RX
23. Test video Signal
24. Change camera to intervalometer mode
25. Check home position for UAS on Mission Planner.
26. Upload or set up Mission (though this should be done before this point!)
27. Check Mission has upload correctly.
28. Monitor GPS lock until **PDOP is <2.0 meters**

Pre Takeoff

29. Check area for flight hazards, low flying aircraft
30. Ensure personnel are clear of takeoff area and flight path

On the UAS

31. Put UAS in 'loiter mode'
32. Push Pre-Arm button (Matrix, IRIS, Solo)
33. Arm the autopilot from the Transmitter
34. Take off
35. Rise to Mission altitude
36. Switch to 'auto' mode