

Foxtech Nimbus VTOL Firmware and Function Upgrade

Newest upgrade for Foxtech Nimbus VTOL with improved flying performance and safety!

Please note we added new settings and parameters, in order to make all feature work, please upgrade to the latest version ArduPlane V4.0.1 Firmware attached and import the newest parameters before the test flying. In the upgraded version:

I. Enhanced flying stability of the Foxtech Nimbus VTOL in both VTOL and Fixed wing mode.

II. Five Emergency Failsafes are added

1: Rolling failsafe: in case of an unexpected rolling over 30 degree than desired, the Vtol motors will assist the flight until the attitude is resumed.

2. Stall failsafe: if the airspeed is smaller than 12m/s caused by e.g very small throttle by inexperienced operator, the Vtol motors will assist the flight until the airspeed is over 16m/s.

3. Fixed wing altitude protection: once the altitude is dropped to 30m in FBWA, CRUISE, AUTO, LOITER, the Foxtech Nimbus VTOL will climb up until it's reaching 30m above the launching altitude.

Note: the plane has to go beyond 30m at least once after taking off to make this protection work.

4. Vtol assisted altitude protection(20m): once the Nimbus VTOL dropped to 20m in fixed wing mode caused by any reason(non-working

elevator or even worse problems), the plane will turn into Vtol assisted flying until the plane goes up beyond 20m.

5. Air speedometer failsafe: once the difference value of air speed and ground speed is over 16m/s, air speed value will no longer be valid and ground speed will be used.

Note: The plane has to go beyond 20m at least once after taking off to make this protection work.

Warning: Normally the protection only happens when the plane has no ability to fly in fixed wing mode, so the operator is suggested to send a Q-LAND or Q-loiter command afterwards or the battery will be drained out very soon!!

Video Instruction:

<https://www.youtube.com/watch?v=5y6XJ5Wz5Hw>