

APM

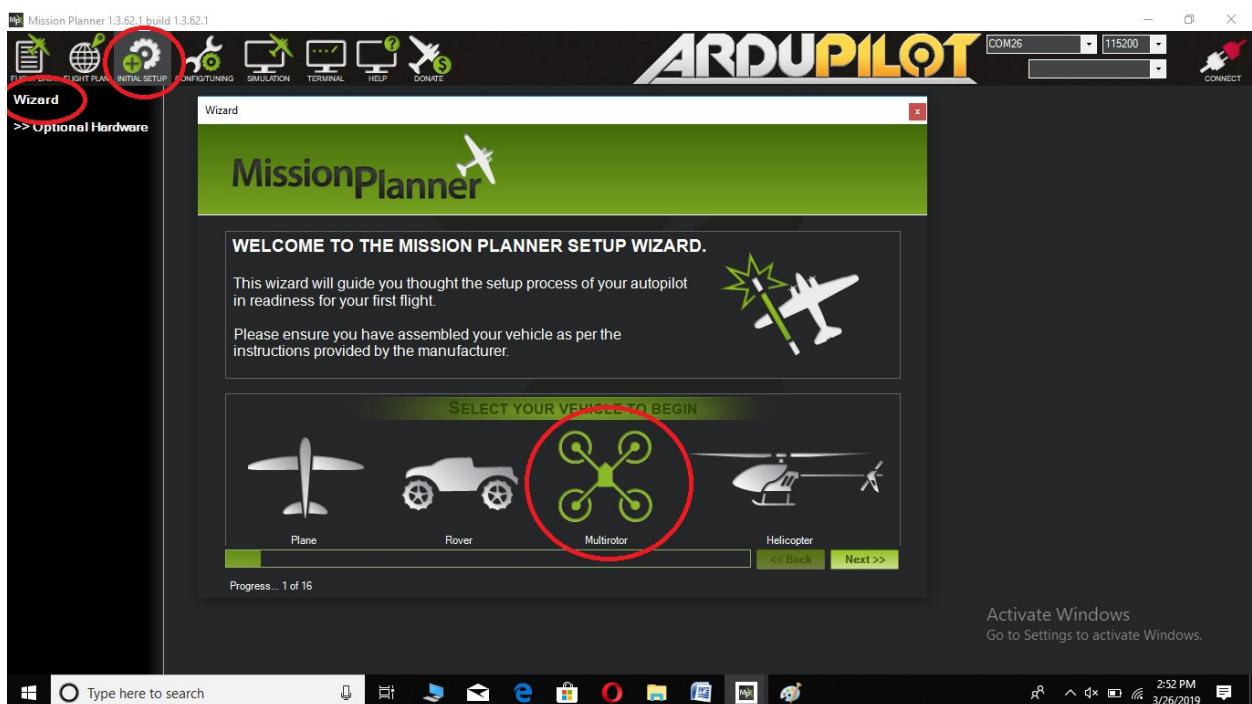
CONFIGURATION

UPDATE FIRMWARE:-

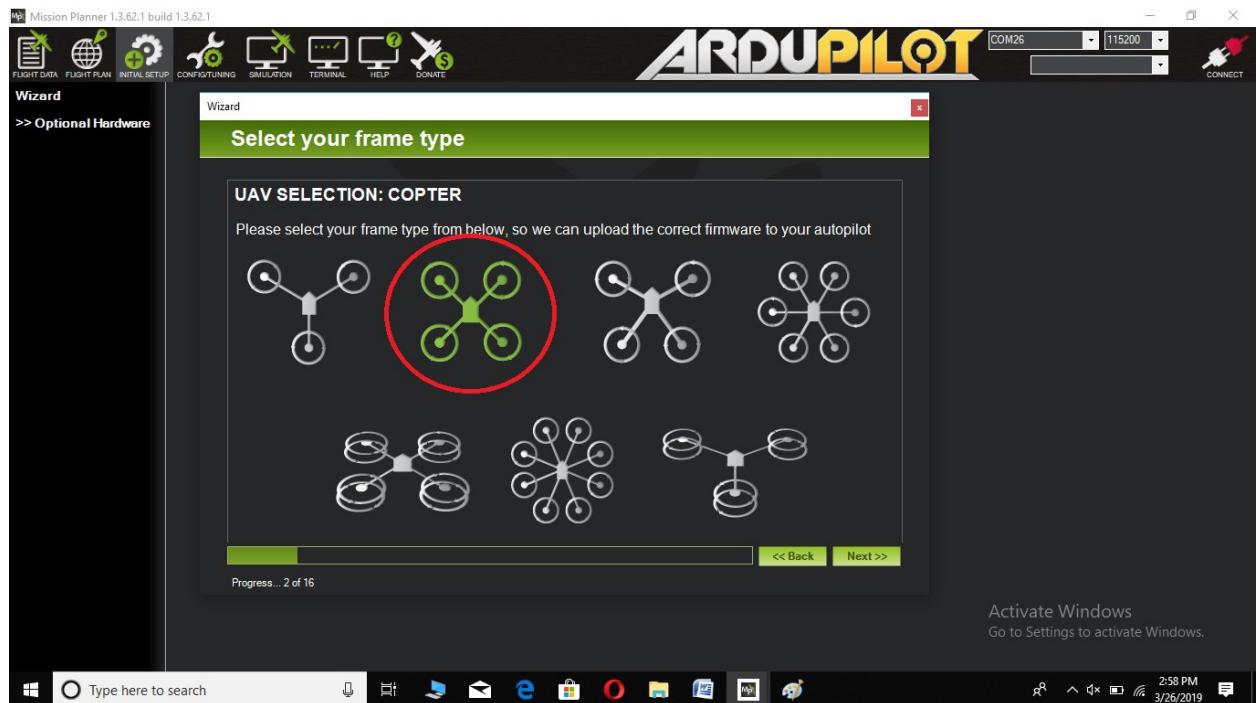
- Select the port to which APM is attached but do not Connect it in the Software.



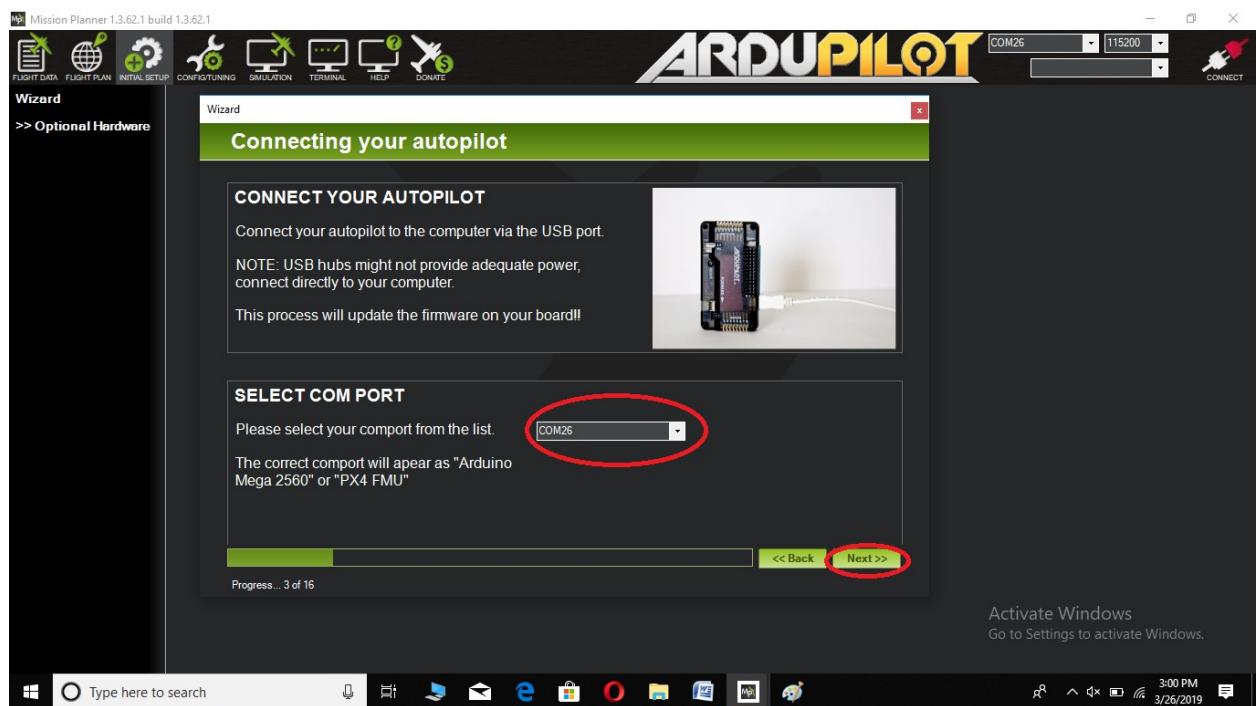
- Go to **INITIAL SETUP** and then double click on **WIZARD**. A tab will appear and select **Multirotor** in it and click **NEXT**.



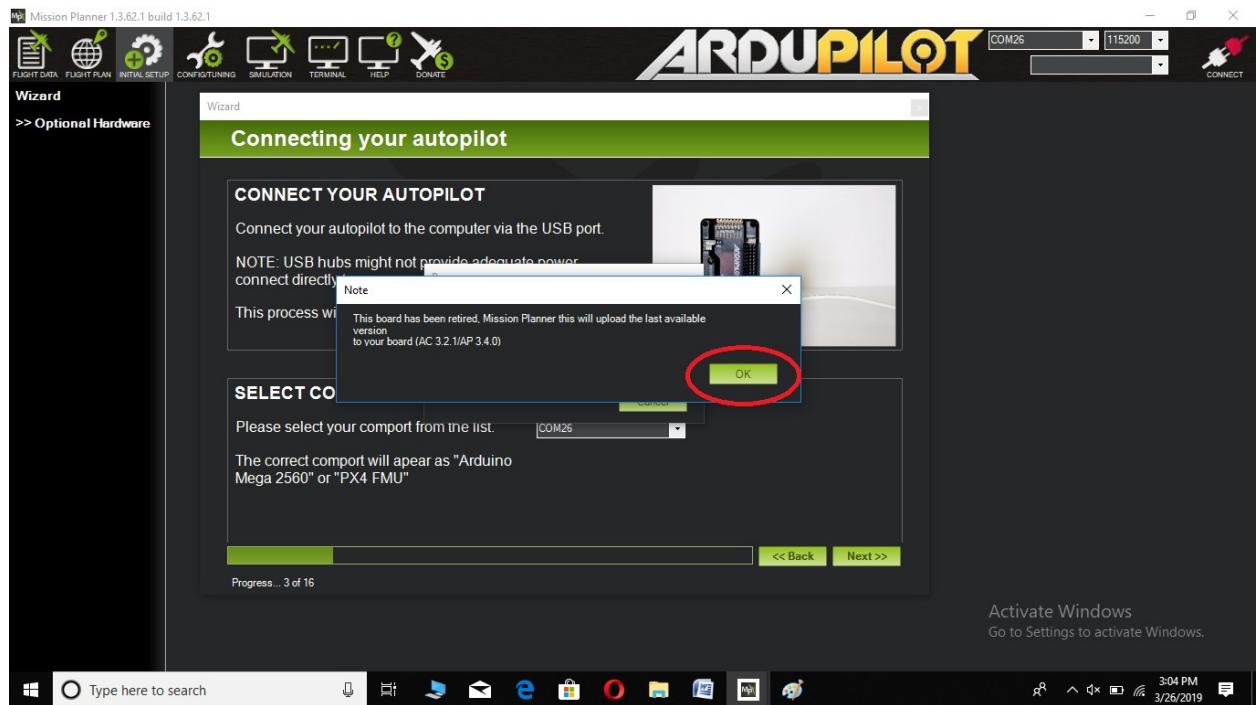
- Select your drone type in it and click **NEXT**.



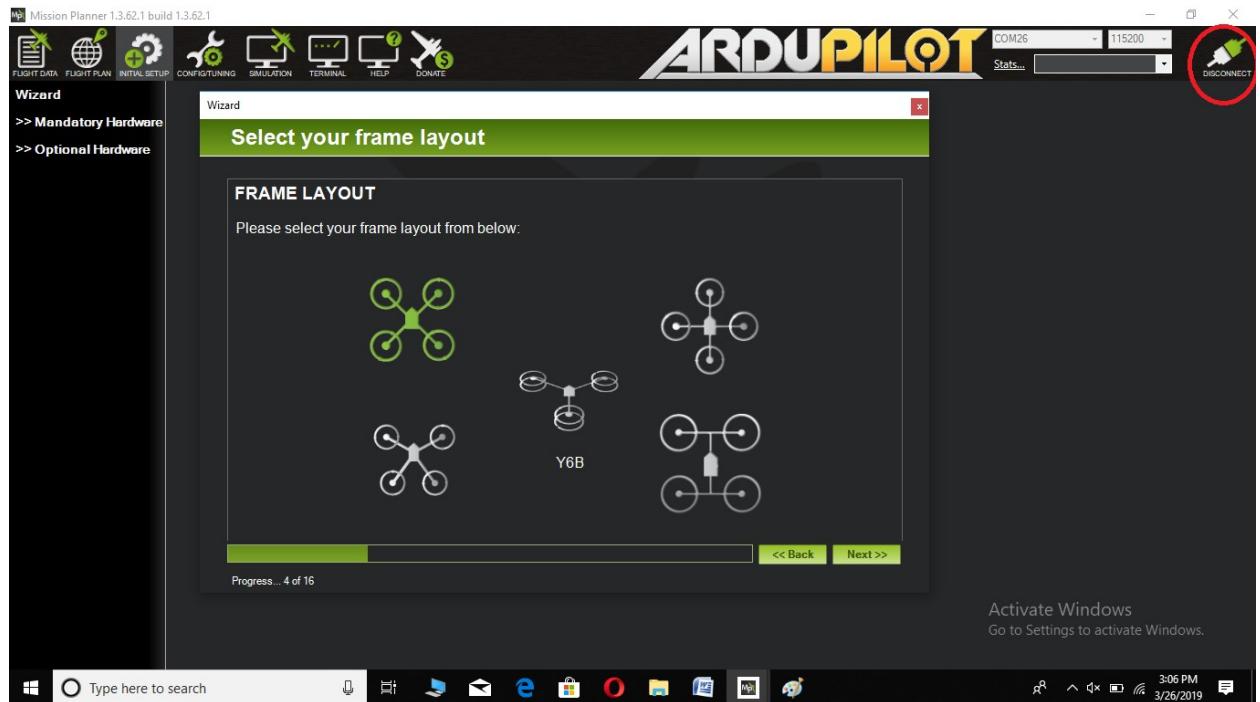
- Select **COM PORT** to which APM is connected and click **NEXT**.



- Click **OK** and this will update the APM.

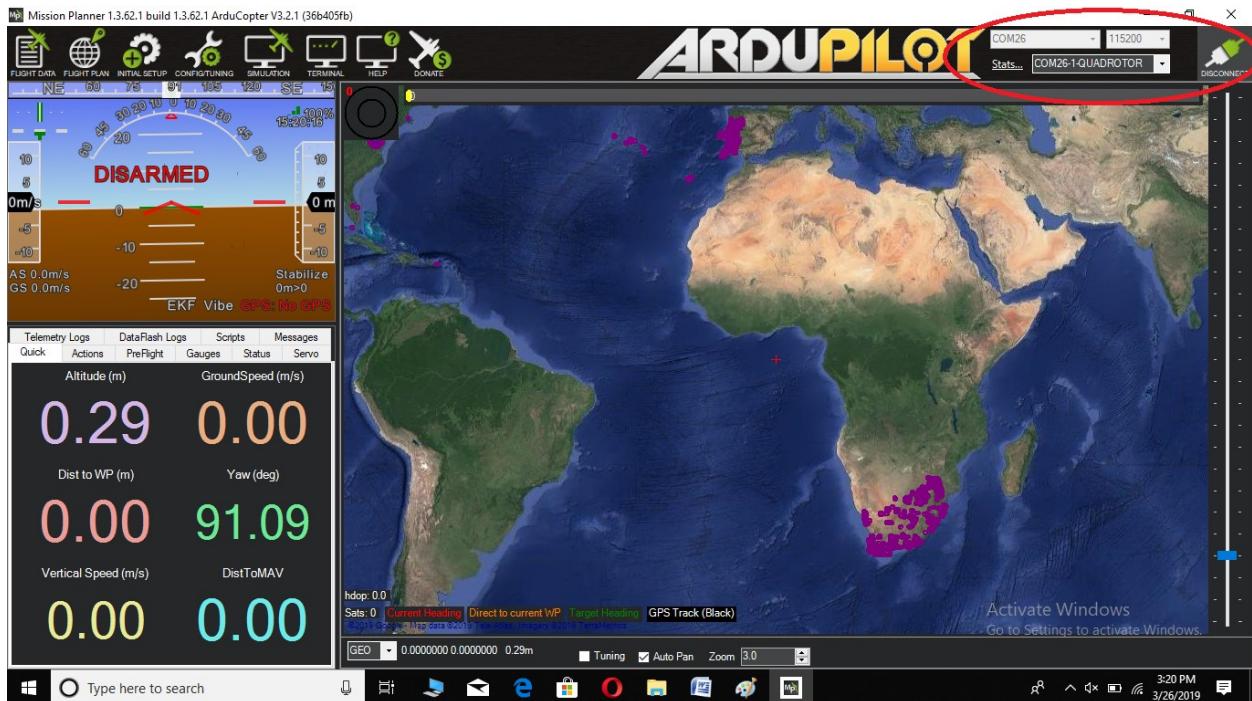


- After updating, APM will automatically connect to the software.

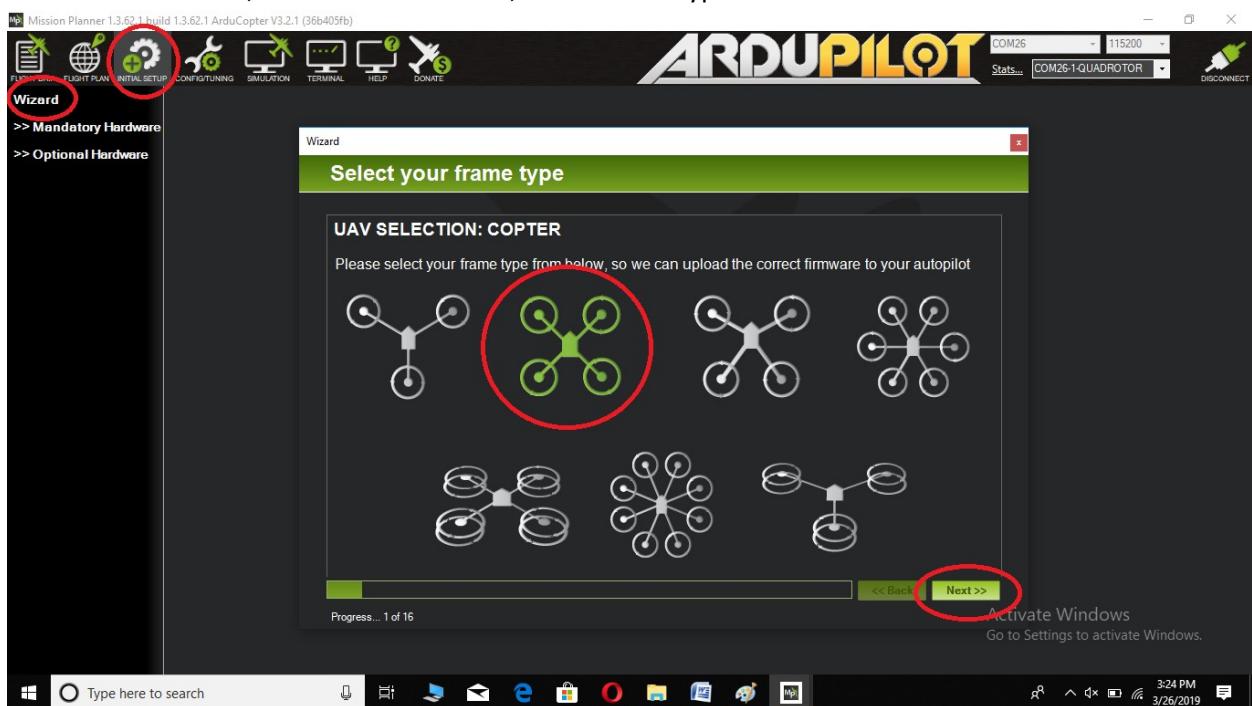


APM CALIBRATION

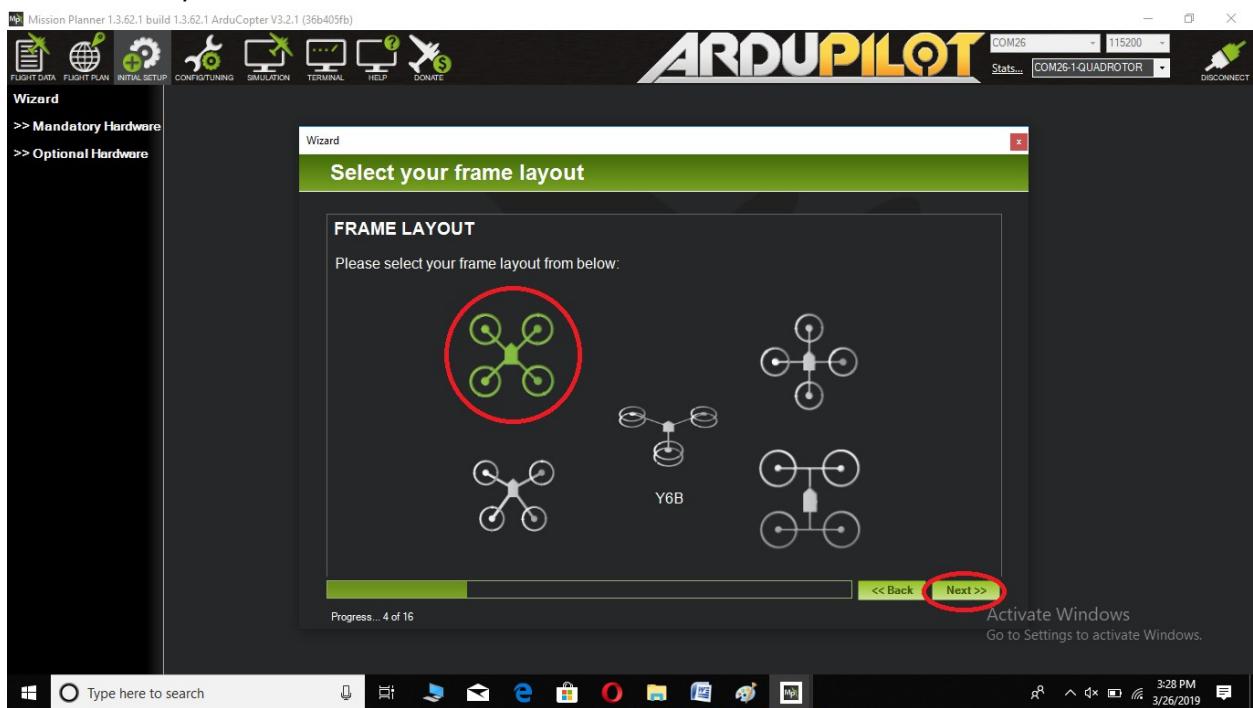
- Select the PORT to which APM is attached and click CONNECT.



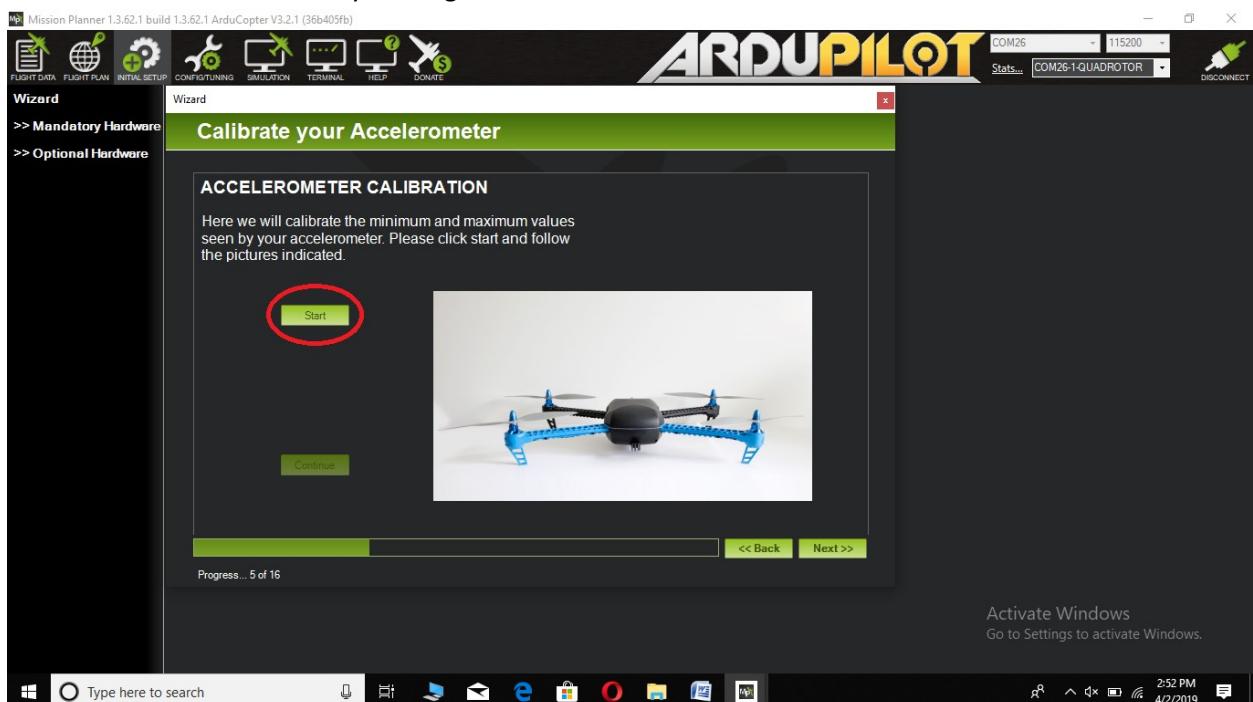
- Go to INITIAL SETUP, double click WIZARD, select frame type and then click NEXT.



- Select frame layout and click **NEXT**.



- Calibrate **ACCELEROMETER** by clicking **START**.



Check the link below for:-

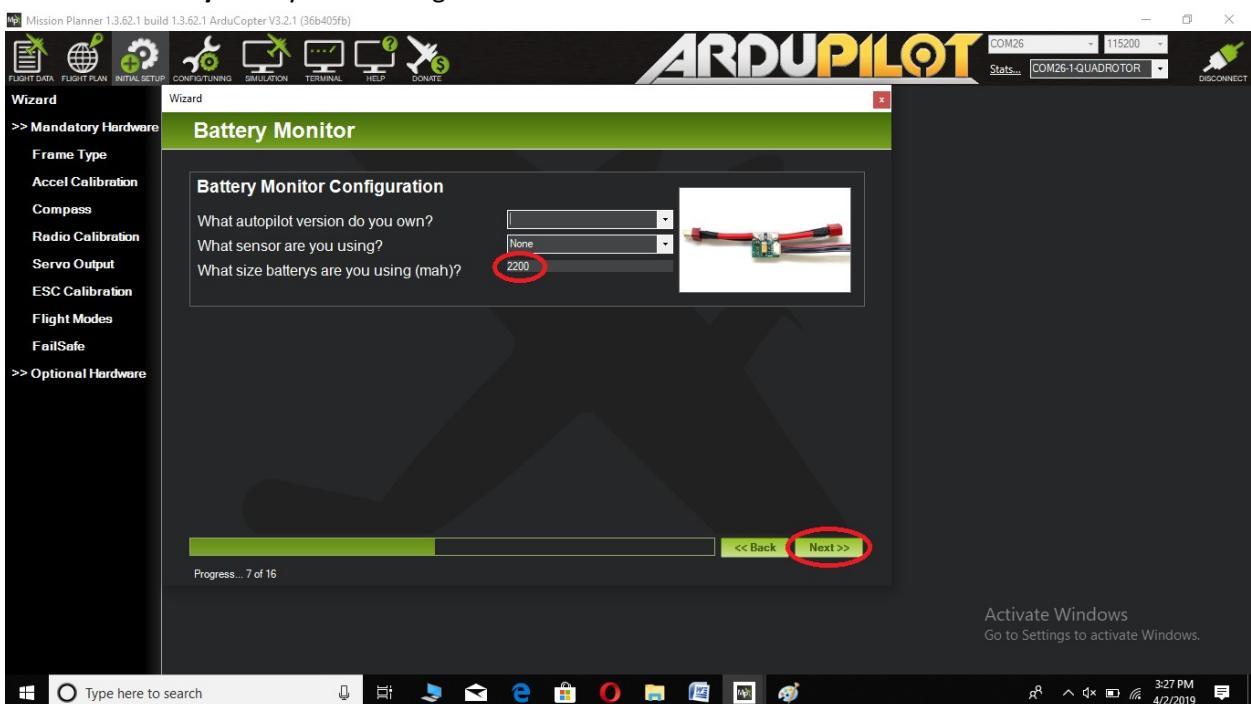
<https://www.youtube.com/watch?v=ILWM0vU-XRA>

- For compass calibration, click **LIVE CALIBRATION** and follow the steps in the video :-
<https://www.youtube.com/watch?v=DmsueBS0J3E>

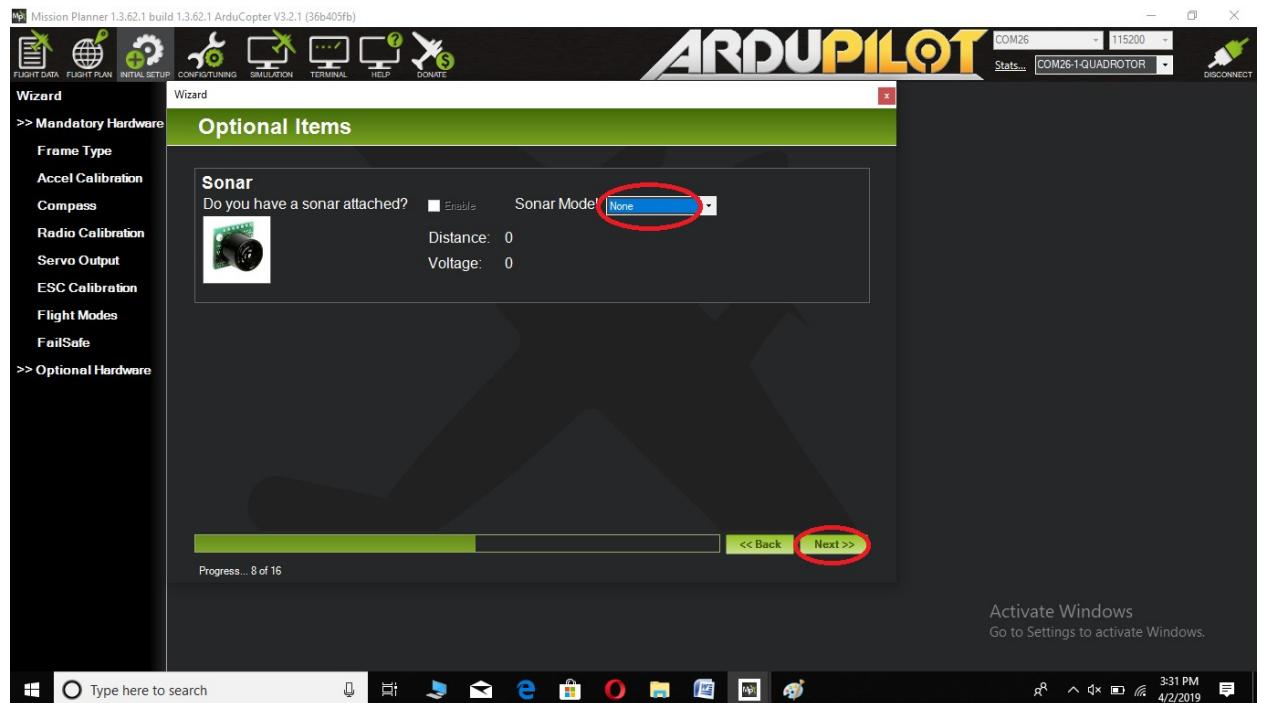


Click **NEXT** once you have finished

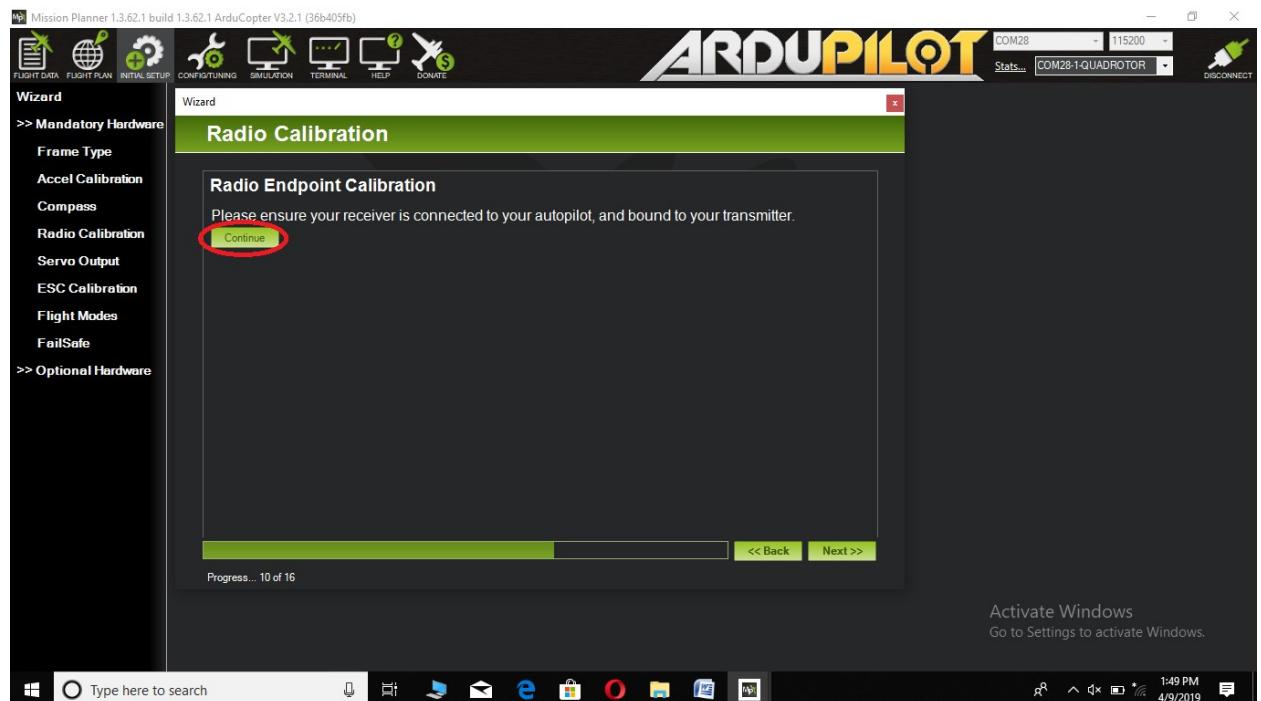
- Select the **Battery mAh** you are using and click **NEXT**



- Select Sonar Model to **NONE** and click **NEXT**

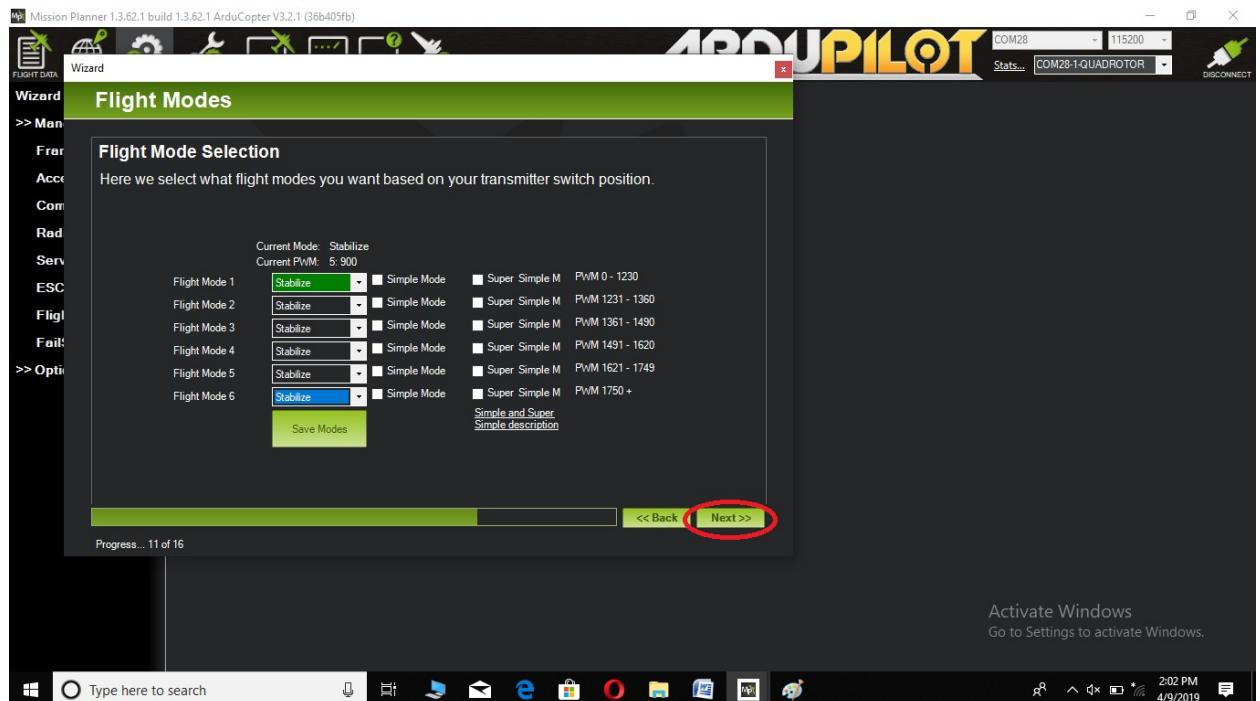


- In **RADIO CALIBRATION** connect Receiver with Transmitter and click **CONTINUE**



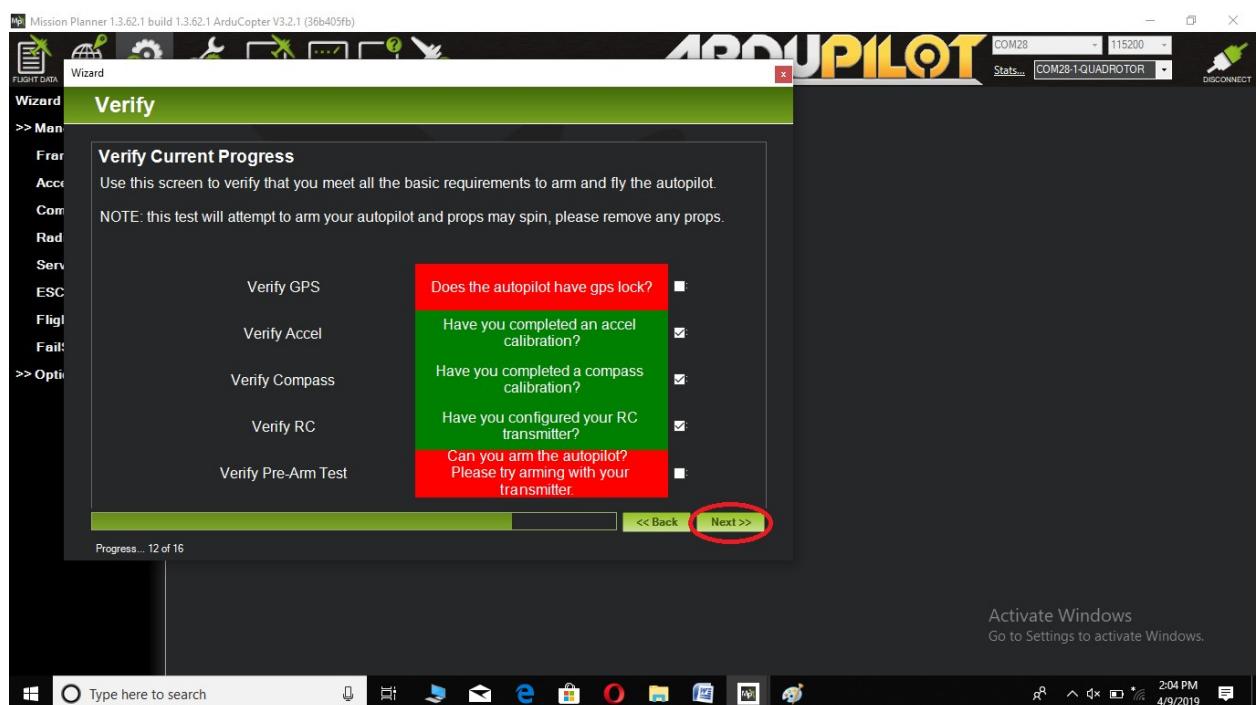
Revolve all the sticks in Transmitter in all directions and click **NEXT**.

- In **FLIGHT MODE SELECTION** select all flight modes to **Stabilize** and click **NEXT**.



The mode which is **Green** is your current selected mode.

- Click **NEXT** in the **VERIFY**.

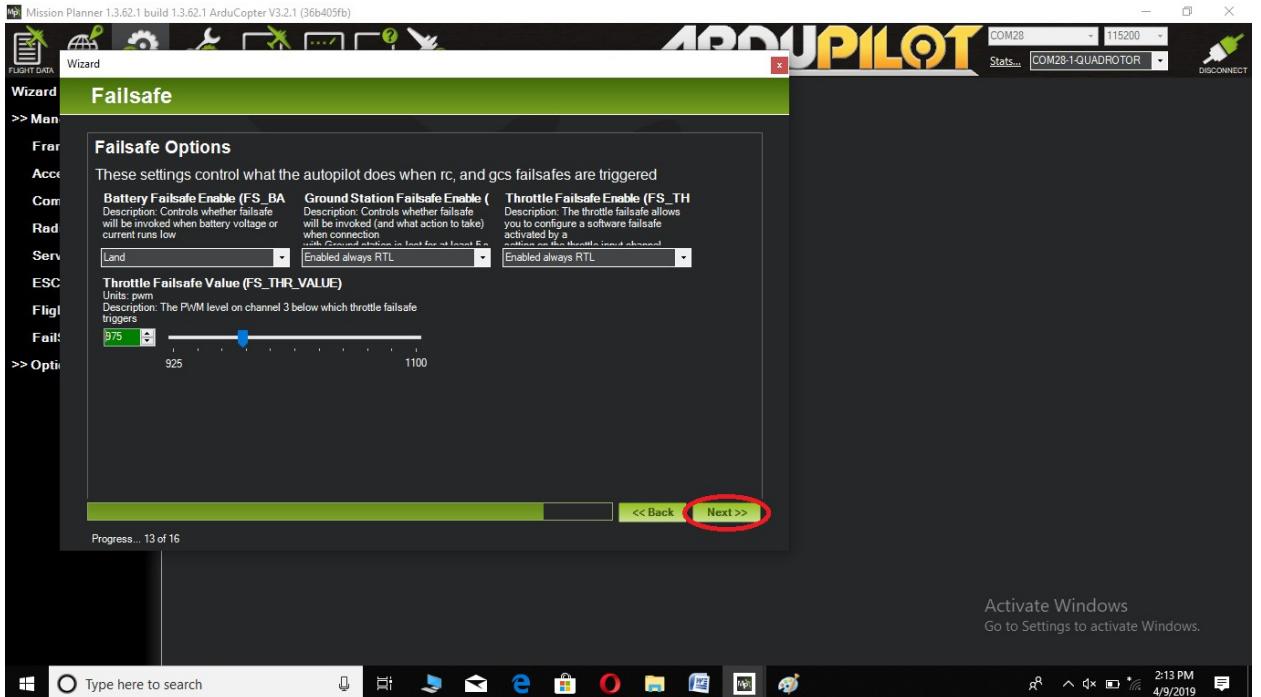


If you want to add **ARM CHECK** select the last box.

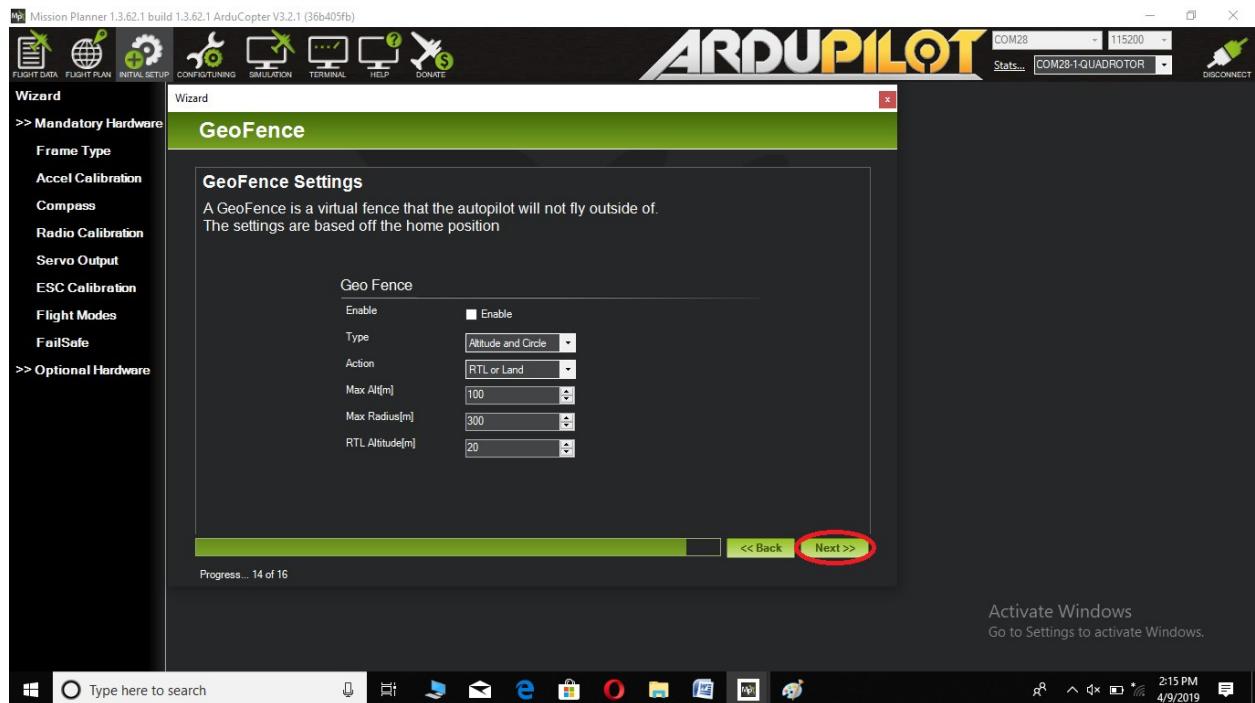
- In FAILSAFE, select the following options.

Battery Failsafe Enable (FS_BA) Description: Controls whether failsafe will be invoked when battery voltage or current runs low <input type="button" value="Land"/>	Ground Station Failsafe Enable (FS_GS) Description: Controls whether failsafe will be invoked (and what action to take) when connection with Ground station is lost for at least 5s <input type="button" value="Enabled always RTL"/>	Throttle Failsafe Enable (FS_TH) Description: The throttle failsafe allows you to configure a software failsafe activated by a setting on the throttle input channel <input type="button" value="Enabled always RTL"/>
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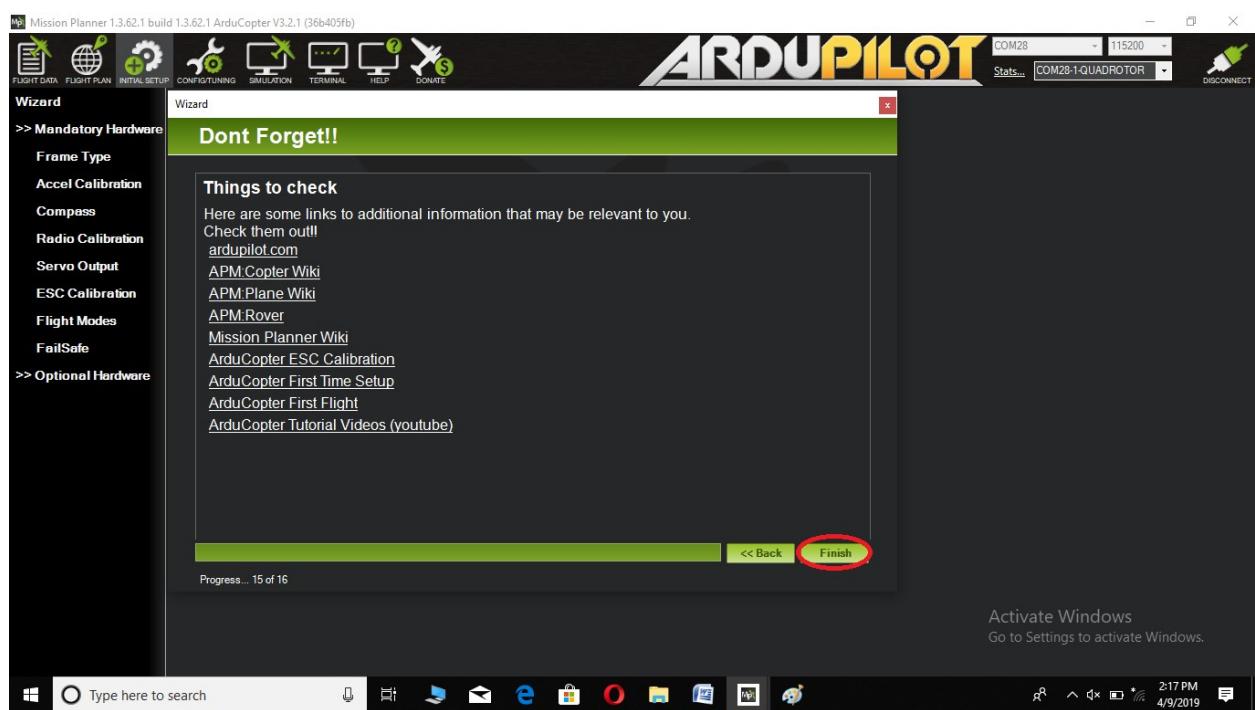
Click **NEXT**.



- Click **NEXT** in **GEOFENCE**.



- Now click **FINISH** in **DON'T FORGET**.

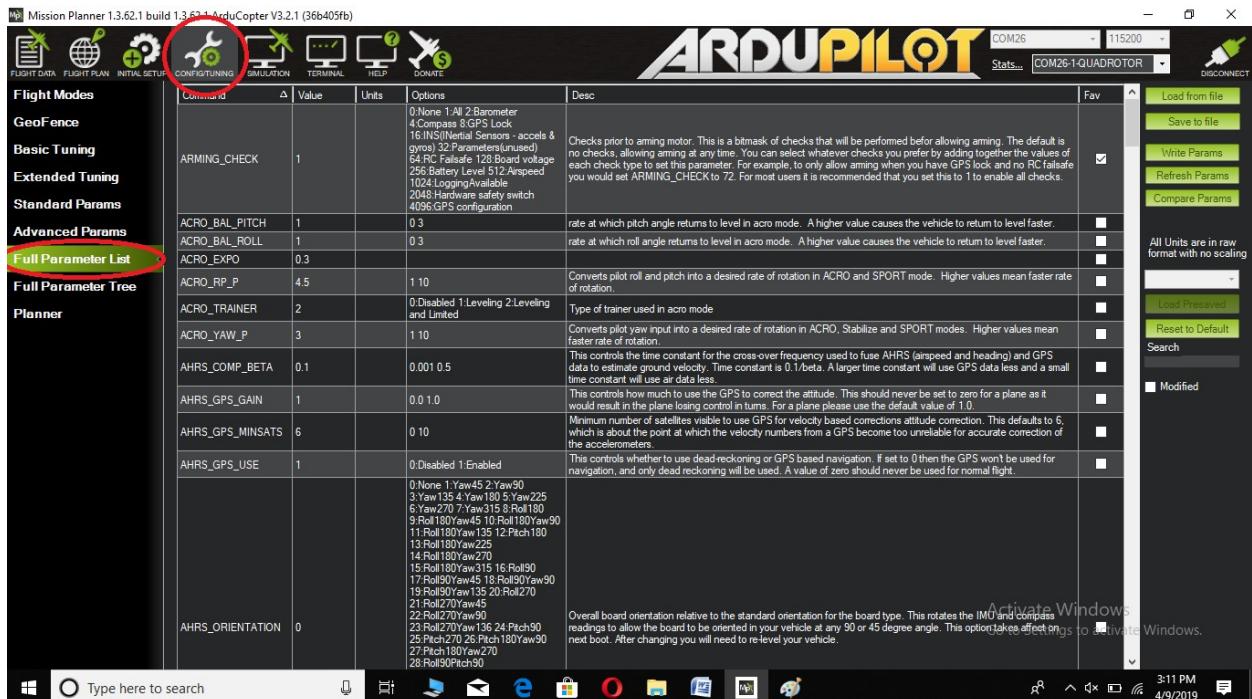


PRE-ARM ERROR (3D FIX)

If 3D FIX Pre ARM Error occurs:-



Then **CONFIGURATION -> FULL PARAMETER LIST**



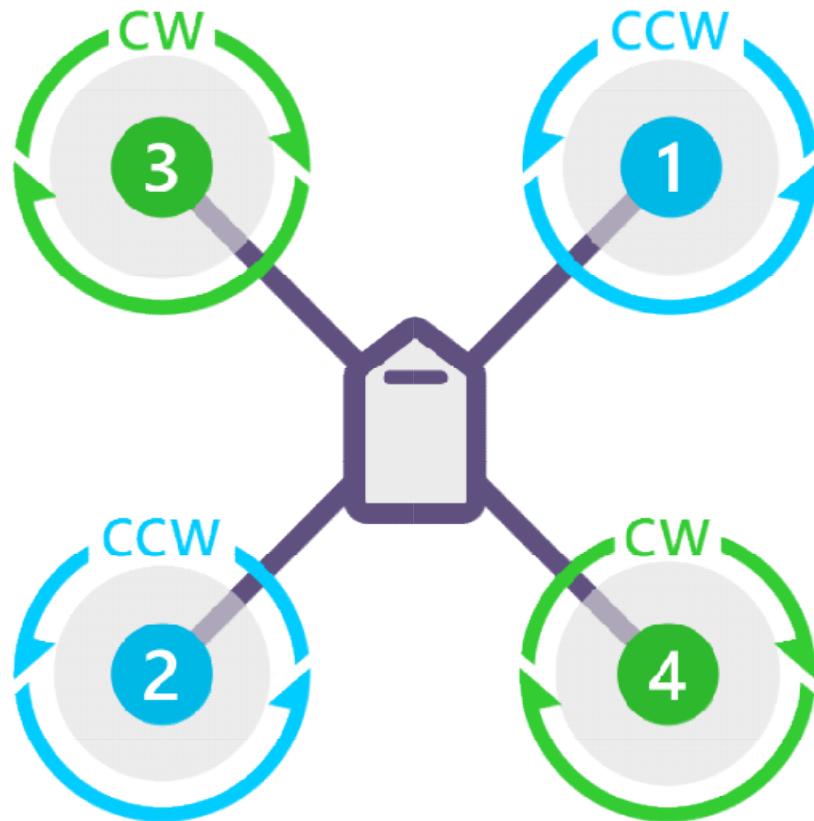
The **SEARCH** bar, search for **ARMING CHECK**, and change its value to 0.

Command	Δ	Value	Units	Options	Desc	Fav	Load from file	Save to file	Write Params	Refresh Params	Compare Params
ARMING_CHECK		1		0:None 1:All 2:Barometer 4:Compass 8:GPS Lock 16:INS(Imperial Sensors - accels & gyros) 32:Parameters(unused) 64:RC Failsafe 128:Board voltage 256:Battery Level 512:Airspeed 1024:Logging Available 2048:Hardware safety switch 4096:GPS configuration	Checks prior to arming motor. This is a bitmask of checks that will be performed before allowing arming. The default is no checks, allowing arming at any time. You can select whatever checks you prefer by adding together the values of each check type to set this parameter. For example, to only allow arming when you have GPS lock and no RC failsafe you would set ARMING_CHECK to 72. For most users it is recommended that you set this to 1 to enable all checks.	<input checked="" type="checkbox"/>	All Units are in raw format with no scaling	<input type="button" value="Load Preset"/>	<input type="button" value="Reset to Default"/>	<input type="button" value="Search"/> Aming_Check	<input type="checkbox"/> Mounted

Then click on **WRITE PARAMETERS**

Command	Δ	Value	Units	Options	Desc	Fav	Load from file	Save to file	Write Params	Refresh Params	Compare Params
ARMING_CHECK		0		0:None 1:All 2:Barometer 4:Compass 8:GPS Lock 16:INS(Imperial Sensors - accels & gyros) 32:Parameters(unused) 64:RC Failsafe 128:Board voltage 256:Battery Level 512:Airspeed 1024:Logging Available 2048:Hardware safety switch 4096:GPS configuration	Checks prior to arming motor. This is a bitmask of checks that will be performed before allowing arming. The default is no checks, allowing arming at any time. You can select whatever checks you prefer by adding together the values of each check type to set this parameter. For example, to only allow arming when you have GPS lock and no RC failsafe you would set ARMING_CHECK to 72. For most users it is recommended that you set this to 1 to enable all checks.	<input checked="" type="checkbox"/>	All Units are in raw format with no scaling	<input type="button" value="Load Preset"/>	<input type="button" value="Reset to Default"/>	<input type="button" value="Search"/> Aming_Check	<input type="checkbox"/> Modified

MOTOR & ESC CHECK AND DIRECTION CHECK



QUAD X

Go to link for motor and ESC check:- https://youtu.be/lvtcDvx_Xqg

The motor at:-

Number 1 will be connected to APM OUTPUT 1

Number 2 will be connected to APM OUTPUT 2

Number 3 will be connected to APM OUTPUT 3

Number 4 will be connected to APM OUTPUT 4

REMOTE CONNECTION

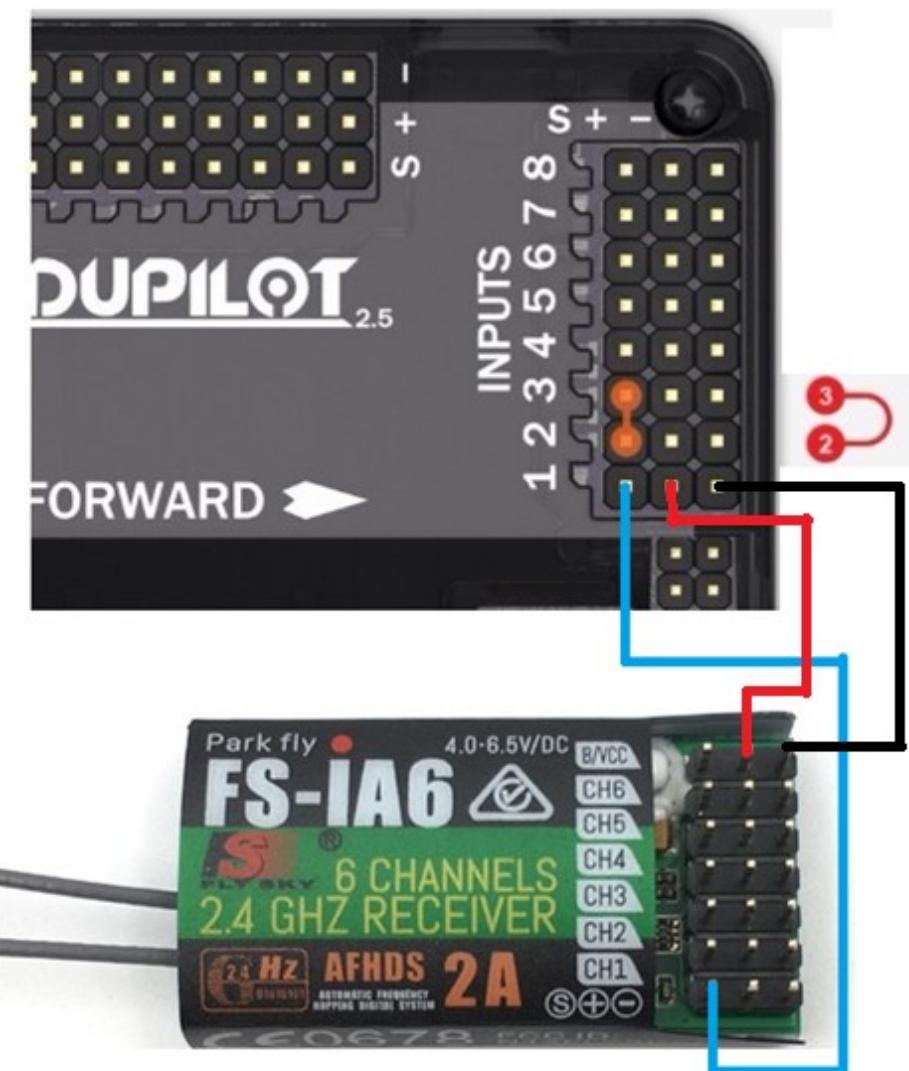
For remote binding, go to the link:-

<https://www.youtube.com/watch?v=XOSg17708XA>

Settings for PPM :-

Go to **SYSTEM -> RX SETUP -> PPM OUTPUT -> ON** (To save changes, hold the CANCEL Button for 2+ seconds).

Now go to **SETUP -> MIX -> MIX IS -> ON** (To save changes, hold the CANCEL Button for 2+ seconds).



Settings for PWM :-

Go to **SYSTEM -> RX SETUP -> PPM OUTPUT -> OFF** (To save changes, hold the CANCEL Button for 2+ seconds).

