

# Getting Your New Open-Source Cheerson CX-20 or Quanam Nova Ready for It's First Flight

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## ***In this guide, you will be:***

- 1- Upgrading the firmware
- 2- Installing a better, tweaked parameter file
- 3- Fully calibrating your new quadcopter

## **INSTALLING MISSION PLANNER**

Here is the link for Mission Planner download and install for Windows only. Make sure to let it install the drivers into your computer during the installation process.

<http://ardupilot.com/downloads/?did=82>

Once installation is complete, open the software.

## **DOWNLOADING THE NEW PARAMETER FILE**

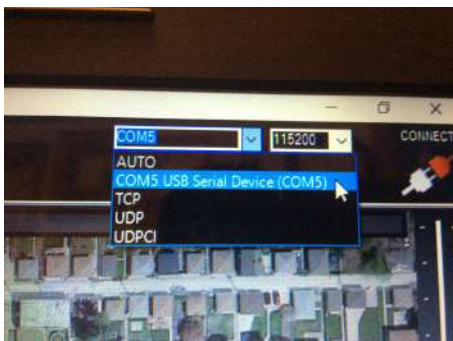
The new parameter file that you will be loading is here:

<https://www.dropbox.com/s/joj406rk8mk9bi/UpgradedParams.param?dl=0>

Please download and save the file to somewhere you can find it later. Do not rename it.

## **UPGRADING THE FIRMWARE**

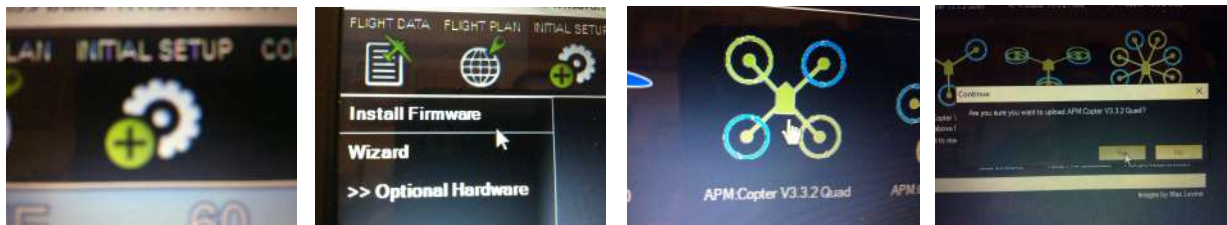
Plug in your CX-20 to the computer with a Mini USB. In Mission Planner, go to the top right corner and check your COM port. Make sure to select the one that says "ArduinoMega..." or "USB Serial Device" after it. The COM port is going to vary. There is no "right" COM port. Now, make sure your baud rate is on 115200.



**If you are currently using or planning on installing telemetry**, read these instructions. Download, extract, and save the below file. Then, go to Initial Setup> Install Firmware> Load Custom Firmware and then select this file. Let it load and continue with the tutorial.  
<http://www.baronerosso.it/forum/attachments/multirotori-droni-rtf/326284d1429882655-quanum-nova-fpv-gps-waypoint-quadcopter-arducopter3.2.1-quad-apm2-custom.hex.zip>

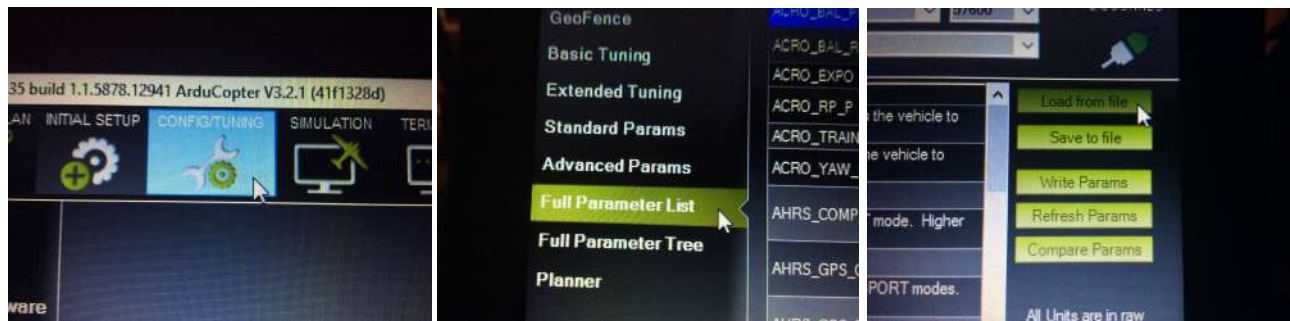
**If not, continue here:** With the USB still connected, go to "Initial Setup" on the top, then "Install Firmware". Now, click on the quad configuration and click yes. Wait for the firmware to load.

Note: Even though it says 3.3.2, the max it will load on APM is 3.2.1. That is perfectly normal.

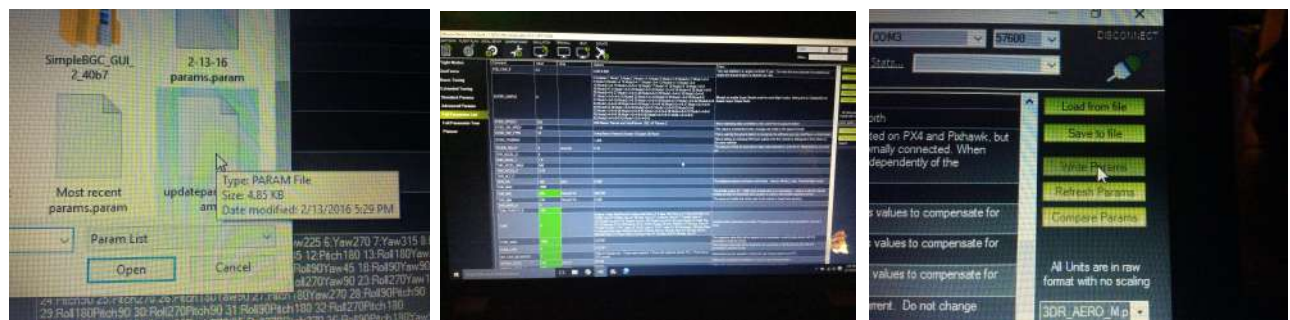


## LOADING THE PARAMETER FILE INTO THE QUAD

Now that the firmware is loaded, you can go to the top right and click connect. Let it connect, then go to Config/Tuning> Full Parameter List> Load From File (top right).

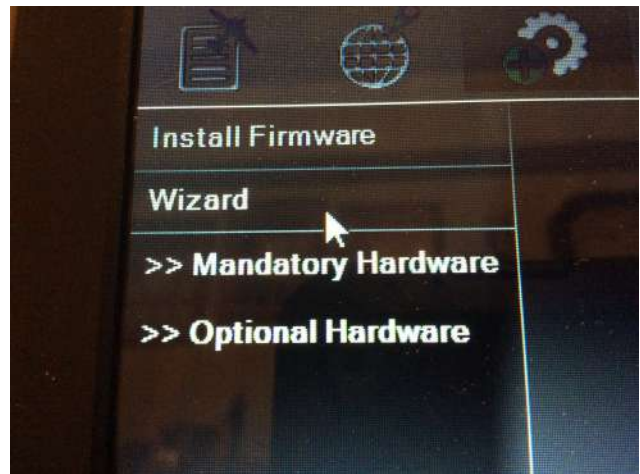
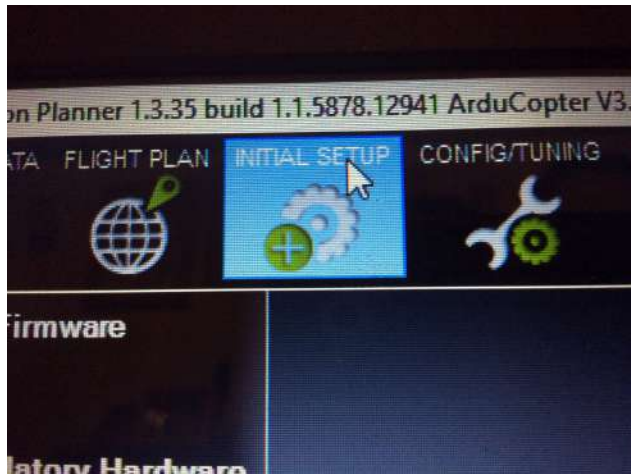


A window will open up. Select that file we downloaded and saved earlier called "UpgradedParams.PARAM". Now, you should see green boxes in the list of params. Click the "Write Params" button on the right side and the green should disappear. You may get 1 or 2 messages, just click ok and disregard them.



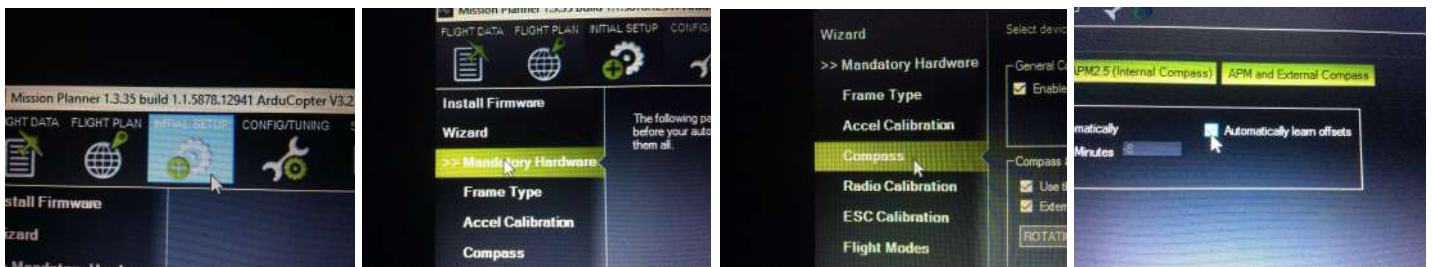
## CALIBRATING

Now you have to fully calibrate the quad after this file has been loaded in order to make sure all the offsets and endpoints are correct for your quad. To do this, go to Initial Setup> Wizard and follow this video: <https://youtu.be/5JvVovl03d0>



## RE-ENABLING COMPASS LEARN

We're almost done. The last step is enabling compass learn so you don't have to calibrate the compass again. Go to Initial Setup> Mandatory Hardware> Compass. Find "Automatically Learn Offsets" at the top and select it. You don't need to click anything else.



Make sure to click "disconnect" at the top right of the page before unplugging anything. You are now fully calibrated and ready for flight. Good luck and happy flying! 😊