

Chimera4 LR

Quick Start and Setup Guide



by Patrick Byars



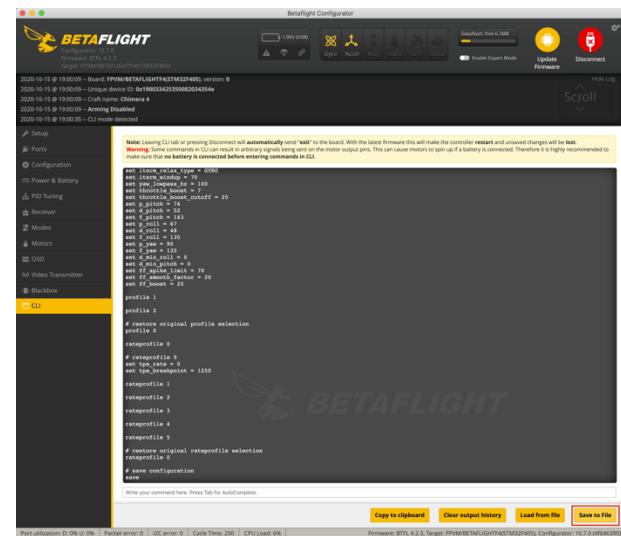
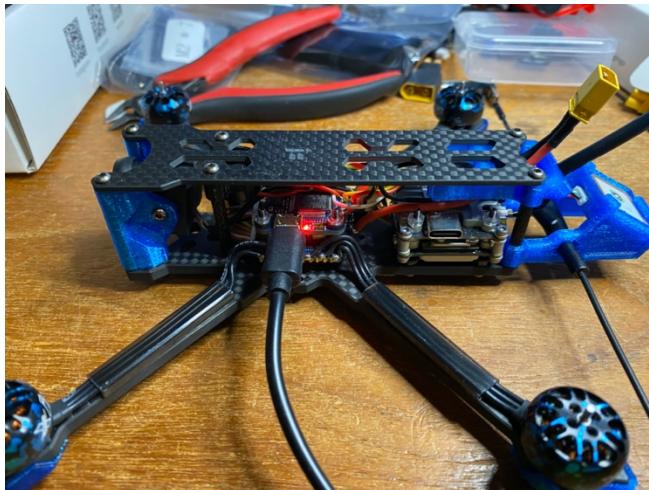
Disclaimer and Safety Guidelines

1. Store the flight battery in a dry and ventilated place away from direct sunlight to prevent the battery from overheating.
2. To avoid possible injury and damage, please fly in good weather conditions and in a safe environment.
3. Please return as soon as possible when there is low battery or strong wind conditions.
4. Please ensure that the power system or other electronic components are soldered correctly, that the power supply works normally and the various components are not damaged before flying, otherwise it may cause the equipment to burn out and other losses or damage to equipment or property.
5. Make sure to operate the aircraft in an open space. Tall steel buildings, mountains, rocks, trees, etc. may interfere with the transmitter signal on the aircraft.
6. To prevent the remote controller from interfering with other wireless equipment, please turn off other WiFi devices.
7. Do not fly near sources of electromagnetic or radio interference. Sources of interference include, but are not limited too, WiFi hotspots, routers, Bluetooth devices, high voltage power lines, high voltage power stations, mobile phone base stations, and television broadcast towers. Otherwise, the wireless transmission performance of the aircraft may be affected by interference and cannot fly normally.
8. Please charge/discharge the battery to a storage voltage of about 3.85V when the battery is not in use.

Caution:

1. Users should ensure that they have a sufficient level of understanding of the aircraft and are aware of all emergency response measures.
2. Users should have a flight plan and do not be reckless, impromptu to fly the aircraft.
3. Please respect the privacy of others when you use aircraft to record video.
4. Stay away from the rotating propellers and motors.
5. After landing, first stop the motor, then turn off the flight battery, and then turn off the remote controller.
6. Turn off power or take off the propellers to prevent motors from high-speed Rotation before setting the remote controller channels, upgrading firmware, and setting parameters.

Let's get started...



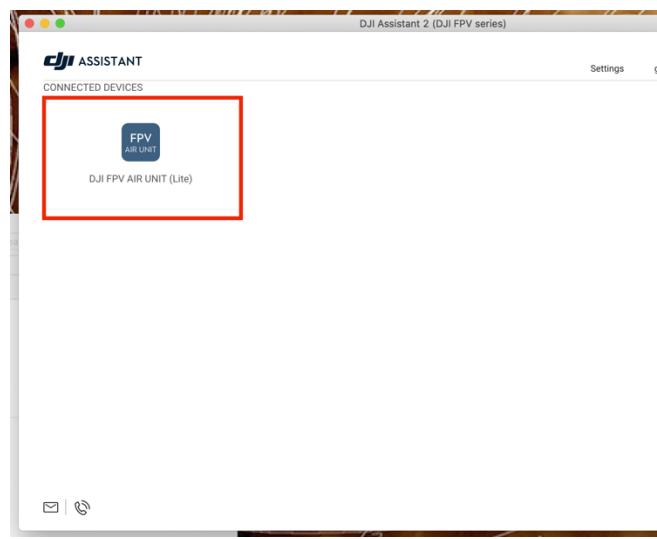
- ❖ The CHIMERA4 LR comes preconfigured and tuned with rates and PIDs and more.
- ❖ **With the Props still off:**
- ❖ Inspect your craft and do the same before every flight. And then plug into the flight controller's USB port.
- ❖ We will start by **backup your settings** in betaflight. Go to the CLI tab/page in betaflight and in the text entry box type Diff All and then hit enter. Next find the save to file button, click save to a file and save in a place you can find later.
- ❖ While in the CLI paste in `set gps_rescue_allow_arming_without_fix = on` then hit enter. Then type save and enter and you will reboot. With this you can arm and fly and GPS lock etc. will follow later but doesn't hinder arming. You can always set to **off** later if the need arises like to use RTH (this disables RTH).
- ❖ Go back to the first page in betaflight and put the quad so it faces away from you and towards the screen. Hit the **reset Z axis button** and the view on screen should match your quad and when you move the quad that it moves in the same way. Do this again after firmware updates too to avoid the "spin flip of death".
- ❖ One the first page (one with quad in middle) notice on the right side of the screen various status fields, Find the block that says "**Arming Disable Flags**". If you have **trouble arming** check back on this box, it's got your answer as to why ☺

agrees on all axis of rotation, you have 30 seconds to perform this task

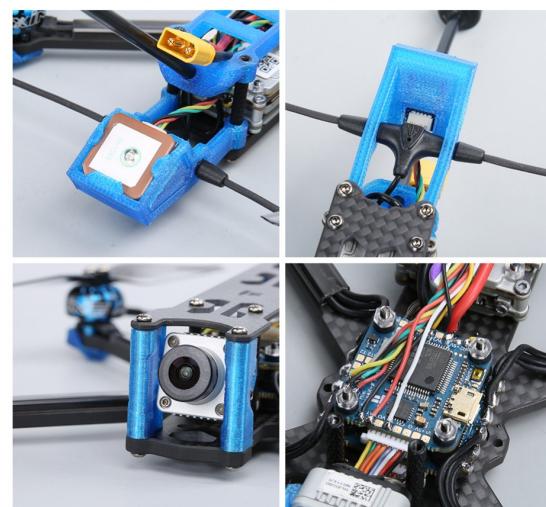
:case of an accident, CLI settings are **not** included - use the command 'diff all' in CLI for this.



Activate your Air Unit and update



- ❖ Activate your Air Unit (you will need to log into your DJI account) and after it will most likely insist on **upgrading** to the latest version (.500 as of this edit). **Do upgrade** but it may also ask you about a *survey*, **Do not start the survey** you can do later, it will ask again trust me...
- ❖ The air unit can overheat without airflow but all is fine if you don't get side tracked. I recommend getting a small desk fan as part of your toolset, use it directly in front of the air unit
- ❖ Note: If the version downloaded does not match the version in your goggles and or transmitter, you should update those also so that all are on the same version.



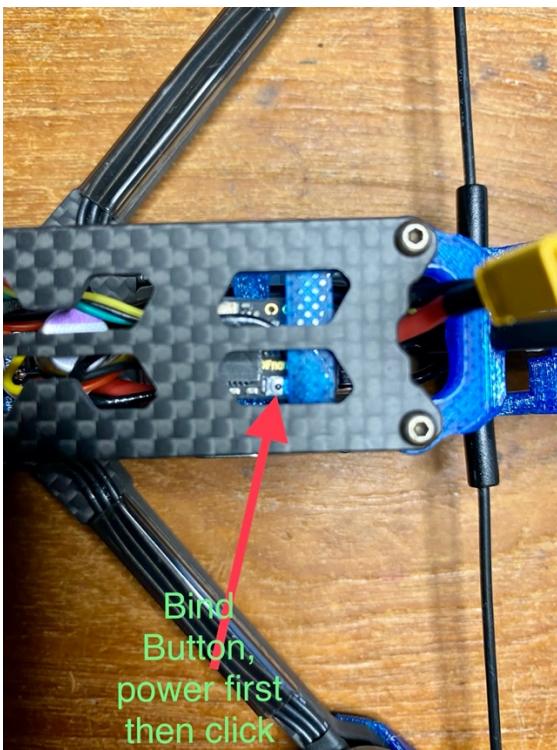
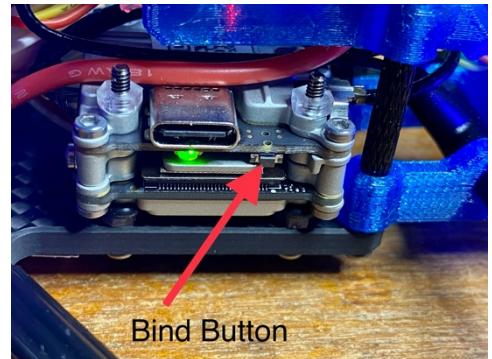
Batteries...

- ❖ You will need your goggles and its power cable, your charged transmitter, and a lipo battery with a XT30 that is fully charged, the CHIMERA4 LR and a battery that is charged for it. Also a paperclip or blunt tool to push a recessed button.
- ❖ I recommend the **iFlight Fullsend 850mah 4S**, Tattu and CNHL. I also highly recommend **iSDT Smart chargers** (806AC shown). Charges very fast and perfectly balanced, makes using storage mode easy. Saved me a bunch of money, I have a fire proof bag of bad (said too low / delta V) batteries to go to the recycle center and thought, well *let's try one on this charger?* It charged it in like 2mins and a perfect balance to two digits places (4.20 for every cell) !! Stunned. Well I went thru that bag and recovered over a dozen batteries! It was \$60 at Pyrodrone and I may (update: I did!) buy a second one. Yes. That good. Safe investment.
- ❖ **TIP:** If you will not be flying the next day or so, only charge your batteries to the **Storage level** (see your charger's instructions) or always do this - it will serve you well) and place in a fire safe place. Before flight, charge (or balance charge). Storage or Puffed, it's that simple...



How to bind your goggles (and Crossfire transmitter to your new

- ❖ Next is activation and binding. There are great videos on how to do this from DJI <https://www.dji.com/fpv/info#downloads> is a link to the DJI page, a new pilot should watch all of these (they are pretty straightforward to understand). But I'll show also you the steps, as it's really pretty simple: Power up Quad, Goggles and DJI controller. use a paper clip and press the link button in the center of the air unit after it has turned **green**. It will turn **red** after pressed.
- ❖ Now, go to your DJI FPV goggles and find the recessed red button under where the battery cable connects to the goggles and press once, wait to hear beeps, then you'll hear air unit respond with beeps and note that the goggles now have video. If it doesn't the first time try again. It will be confirmation and should now have video.
- ❖ Next we need to bind the Crossfire transmitter but if you are using a different transmitter and receiver like FrSky or the DJI, follow that products instructions to bind instead and you are done as you only bind the goggles for Crossfire or FrSky. See one of my any other guides with the DJI Tx binding instructions if using DJI Transmitter
- ❖ TBS Transmitter ... so go to quad and first note the bind button, the LED is bright and the button is to the right of the LED so it helps to look first.. Click once with paperclip or blunt not sharp tool, and get the blinking **green** light. Go to the Tx (Tango2 in this example) and press Menu button, Then select Crossfire Menu, Tango II XF, then you should see Bind option. Press Bind. It will start then ask if you want to update the Rx (YES! Wish all did it this way) click Update. Allow to fully complete. You should now have RSSI on the main screen after it completes.



After Binding...



- ❖ Go to your goggles and set protocol correctly. On goggles, find the 5 way button/joystick Menu button. Press it, then choose Settings, then Device, and then Protocol. Make sure it says “**Normal**”. Next back up a menu or two to the settings menu and go to Display, OSD settings make sure **Custom OSD** settings is on.
- ❖ Standard convention for transmitters is all switches should be in up or the forward position which is off when you power off and on the transmitter, this is sometimes called the safe position.
- ❖ Your CHIMERA4 LR probably came configured with just one control that you can use (**Arm on SA**) and set with Angle Mode on always and I think that the buzzer is enabled as it has a real buzzer! Set all the way down SC to beep! This guide will show you how to add more (and I recommend beeper on SD (Aux4) and good stuff like Turtle Recovery Mode on SC).

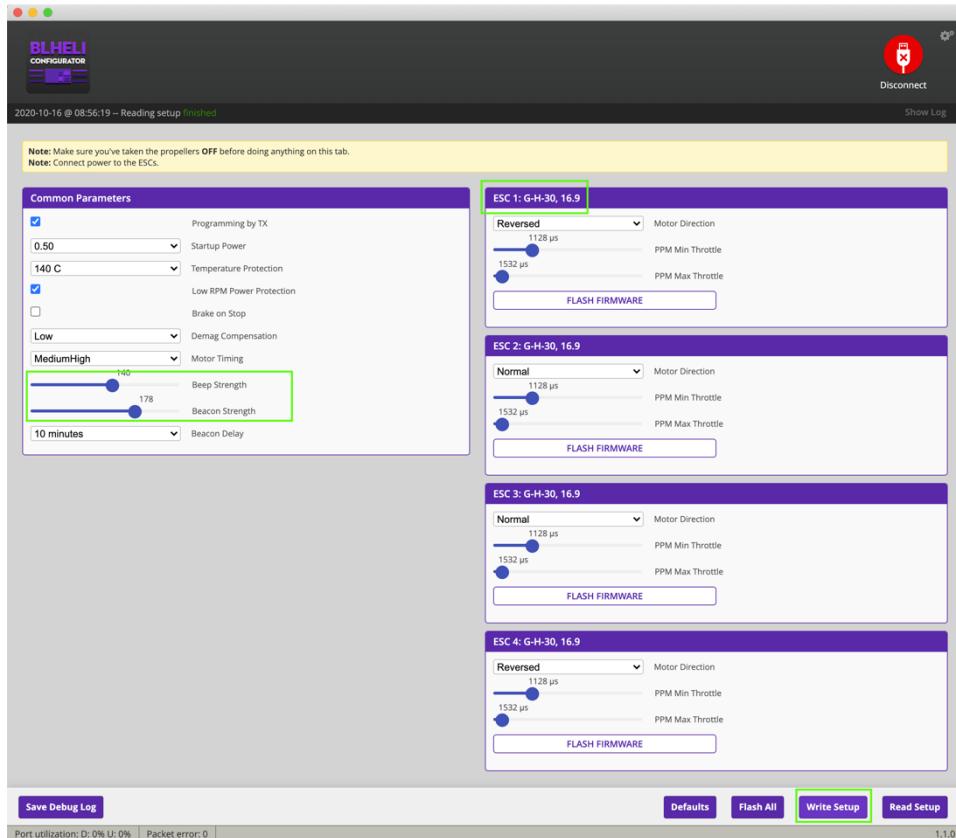
After binding...

- ❖ Once ready to fly, Power your transmitter and safe all switches in the up or off position. Check that the throttle is in fact at zero.
- ❖ SA is your Arm switch, press down to arm. On my Tango2 I have Aux set to SD so this setup doesn't change but it has arm on the right at SD and Beeper on SA. Many find it easier to disarm with the right hand and I am starting to agree. Beep once before take off to test, then arm and the props will spin.
- ❖ If you don't have your goggles on put them on (unless just flying line of sight (LOS)) and move SA to the down or on position. To take off raise the throttle slowly *but not too slowly*, you want a smooth take off so give it some gas.
- ❖ To land locate the spot you want to land and come in slow and in steady forward and downward motion. Land and move throttle to zero and disarm by move switch SA to up or off position, Congratulations! Don't forget to **disconnect battery from quad**, **unplug goggles** and **turn off transmitter** once done flying.
- ❖ Following this guide is how to do a full setup including how to back up your settings, update the firmware, configure the ESCs with BLHeli Configurator, and in betaflight setup all pages including mode switches, rates, PIDs and RPM filtering and more but you don't need any of that for now, go fly! #SendIt





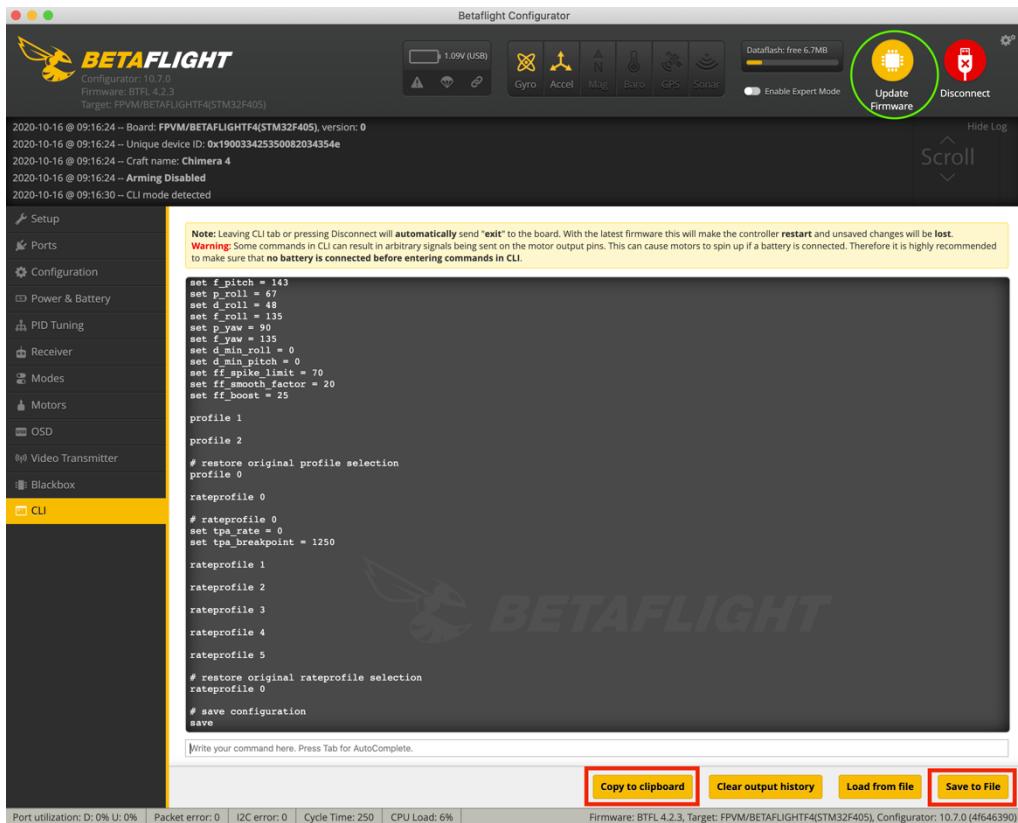
Updating Betaflight to the latest version and setting up RPM filtering and Bidirectional Dshot (*but first we should check the BLHELI32 ESC settings with the BLHeli_S configurator app*)



Verify your settings match these...

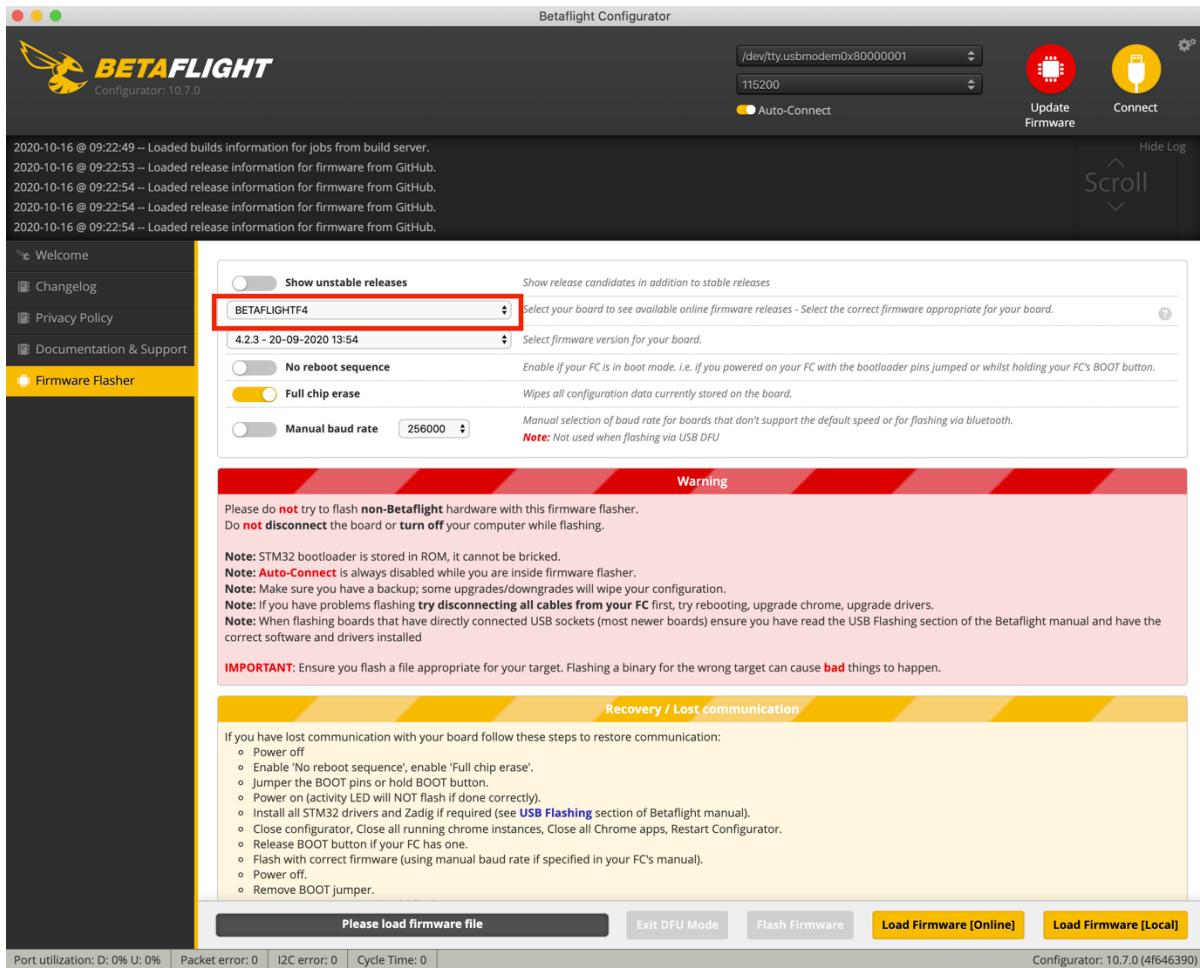
- ❖ We want to have BLHeli_S setup for BiDirectional DShot which requires ver 16.77 or later (currently using 16.9). Let's check the settings (and these need to be set for new parts) in BLS Configurator (from Oscar Liang's excellent guide on this subject FYI).
- ❖ I highly recommend increasing the beep and signal volume for startup and lost craft recovery settings.
- ❖ PWM Frequency: 48KHz is set with this version of the firmware
- ❖ Motor Timing: MediumHigh.
- ❖ This is also where you can change the motor direction, instead of swapping wires at the motor.

Updating Betaflight to the latest version and complete setup including RPM filtering continued...



- ❖ Next let's save your settings that are different than the default values with the DIFF command in the CLI (like prior in guide).
- ❖ Clear the screen with the button for that and type **DIFF ALL** (not a dump all, we will be getting the “dump” part of the settings after connecting for the first time after firmware updating as don't want to mingle or overwrite them. Good setup hygiene practices 😊) and then hit enter. The command executes (this can be done with the gui now too) now click the **button “copy to clipboard”**. Also click **save to file button** and save where you can find it again later. But the clipboard is what we need right now.
- ❖ Next Click the **Update Firmware** round yellow button in the top right (after you click copy to firmware, click again if in doubt before flashing).

Updating Betaflight to the latest version continued...

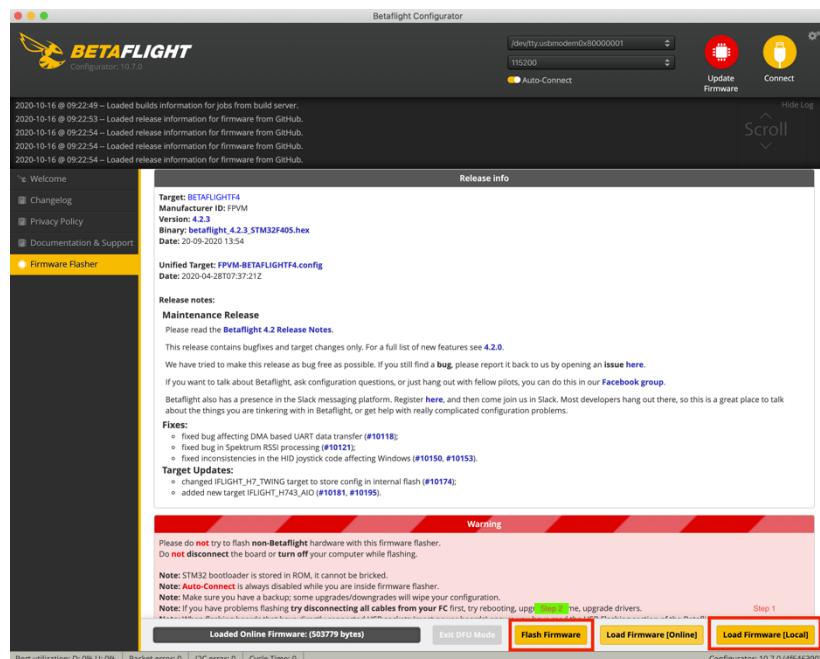


❖ You should be in the Firmware Flasher section.

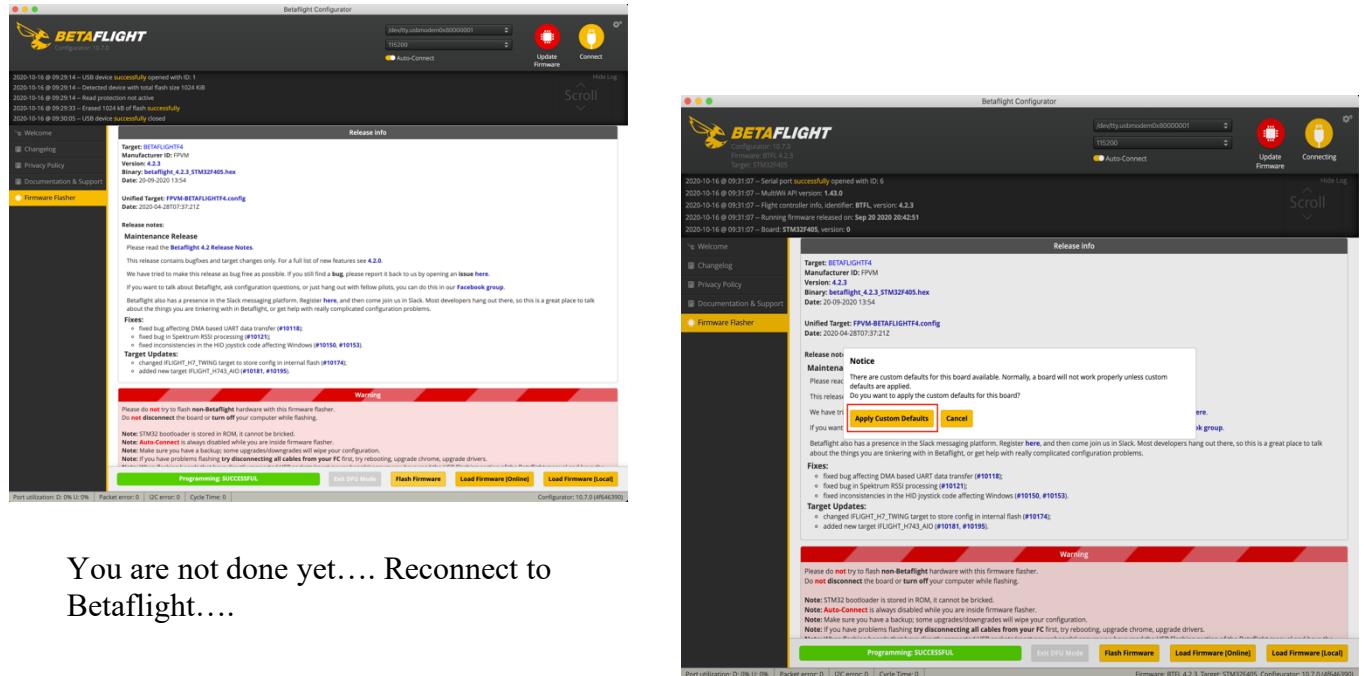
❖ Select the BETAFLIGHTF4 target and the latest betaflight (as of today - 4.2.3).

❖ Click “Load Firmware online” button.

❖ Click the Flash Firmware button.



Updating Betaflight to the latest version continued...

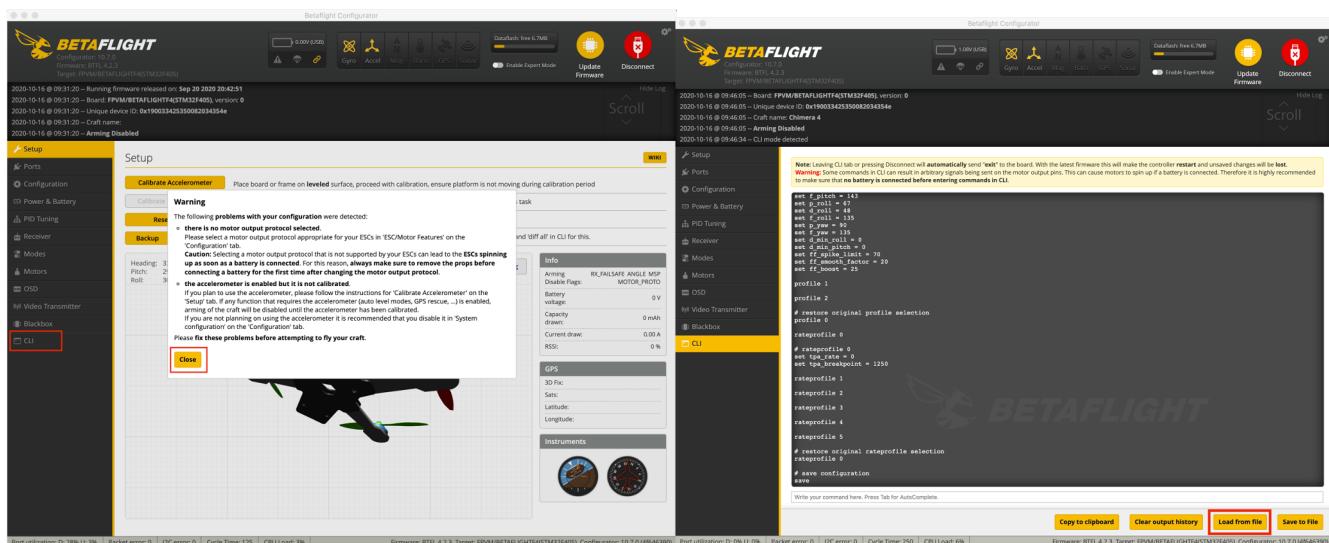


You are not done yet.... Reconnect to Betaflight....

Be sure to click the “Apply Custom Defaults” (nearly always choose this) button.

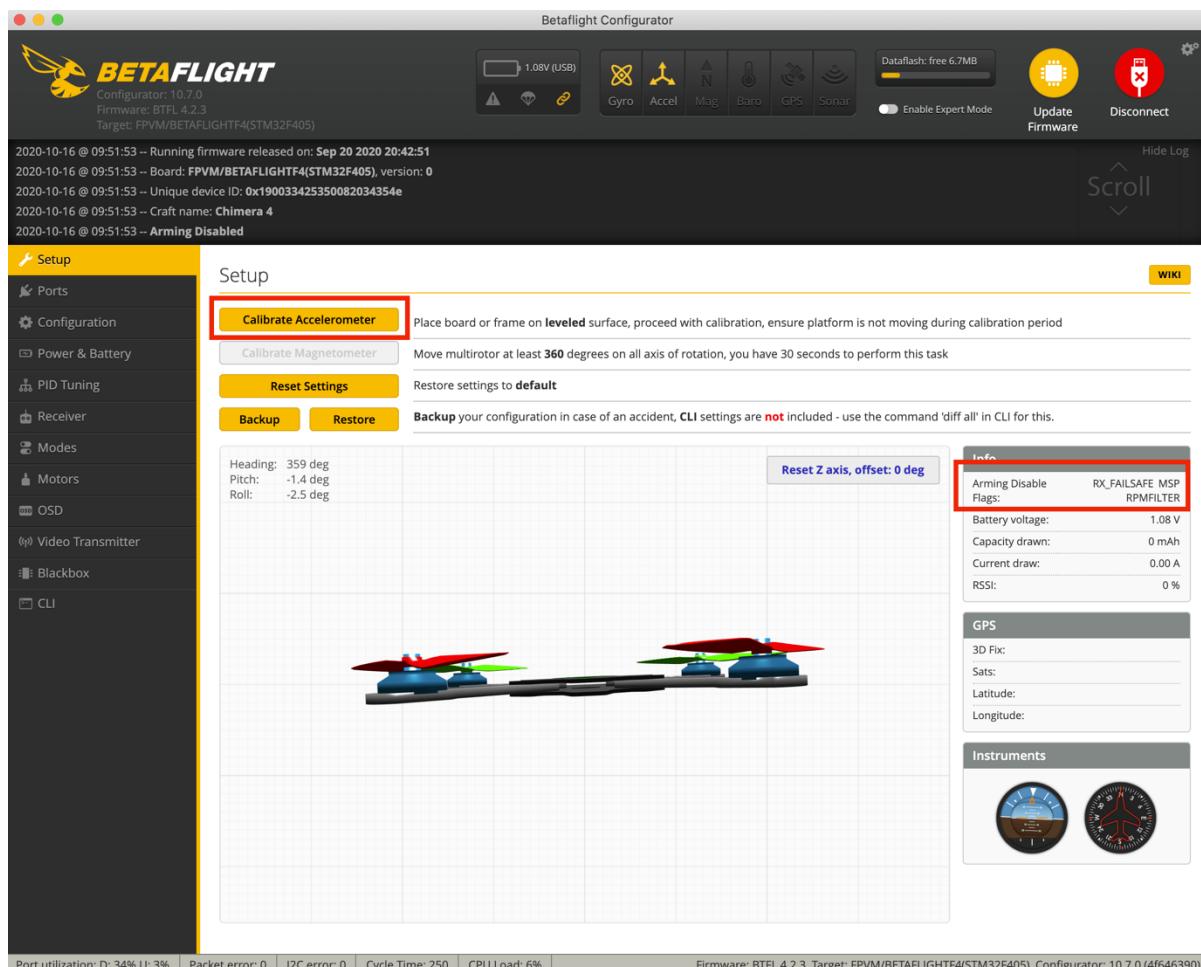
It will reboot and you will get a screen saying stuff isn’t set. No worries you have the diff all in the clipboard and saved to file. Hit the Close button and then click the tab for the CLI (command line editor). Or load the file you saved and then hit execute button (same as pasting and then saving).

In the CLI text box paste the clipboard file. Review any red flags. If none it will automatically save and reboot after you hit enter. If it doesn’t review but then type save and enter. It will reboot. If you had red flags the next pages will show you all the stuff to review and check (we need to adjust the filter settings if you got a red flag and review all the other settings).

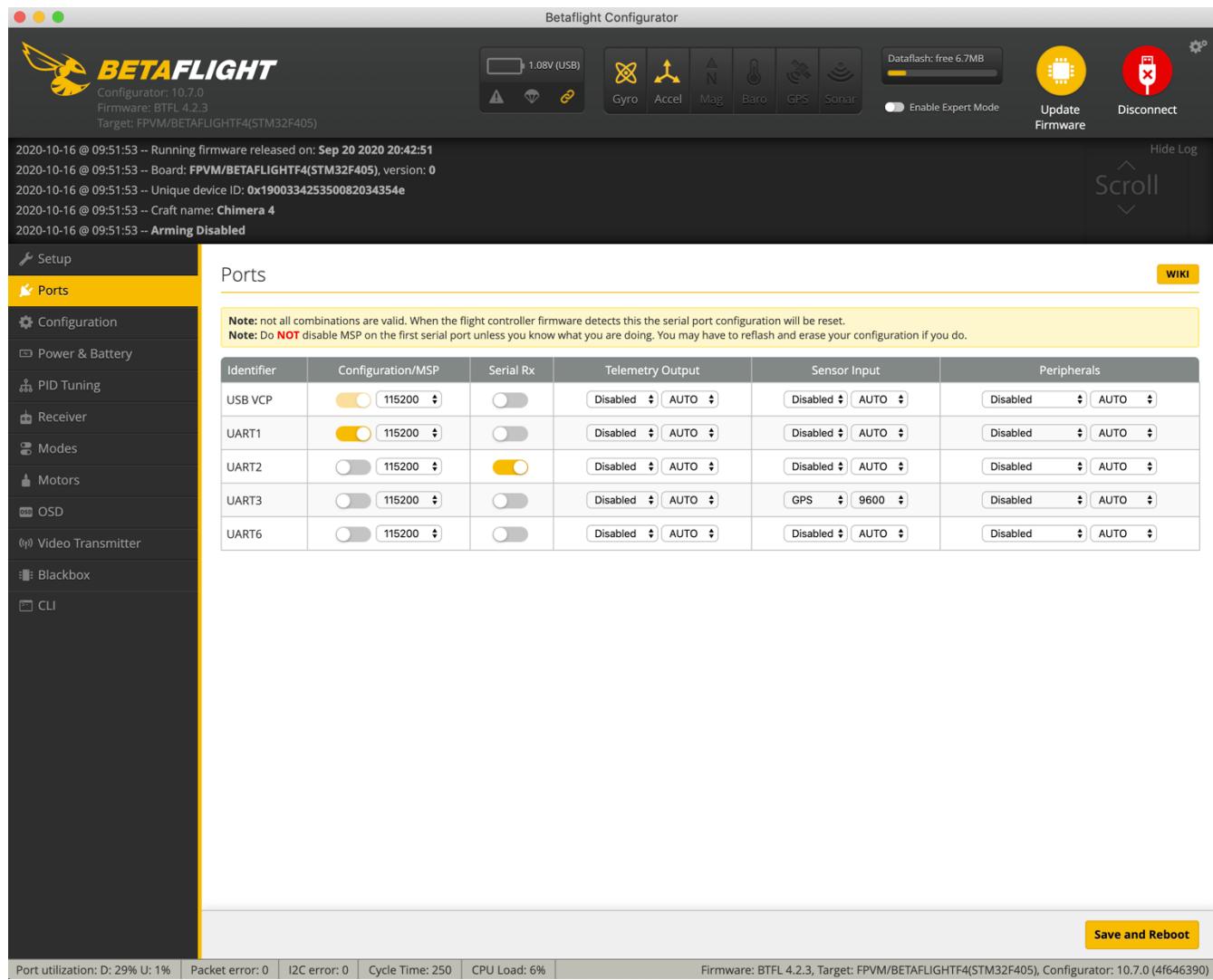


Betaflight setup for CHIMERA4 LR (Setup)

- ❖ Let's review each page in Betaflight to see if correctly setup. Everyone is different and setups vary. For this guide I am using my current settings for my personal CHIMERA4 LR.
- ❖ This is probably the most useful and overlooked screens in Betaflight. for example if you cannot figure out why it won't arm, come here while connected with props off and check the "**Arming Disable Flags**" on the right here. But right now we have two important tasks to perform.
- ❖ First, Use the **Reset the Z axis button** and tilt / move etc the quad, and does it move the same way on screen as in real life? If not we will later at the Config BF screen need to set the Yaw axis value (hint might need -90).
- ❖ Second, **is it level?** If it is and looking good stop here, but if not, you will need to find the most level spot near your PC. Use a level gauge or a smartphone app to find the best spot and put your quad there. Then hit the calibrate Accelerometer button.



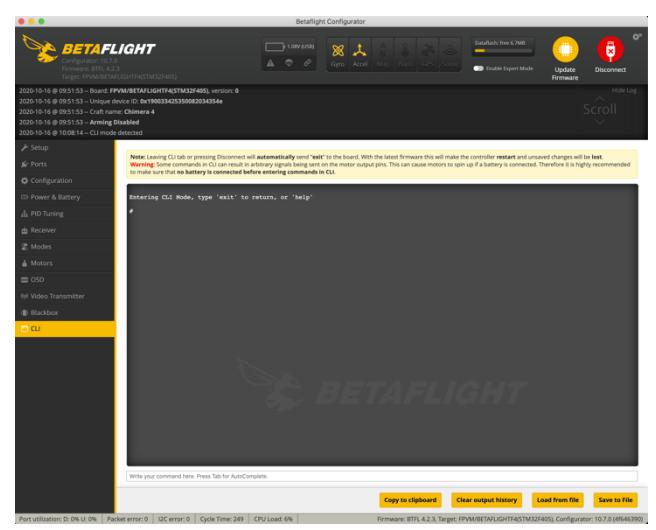
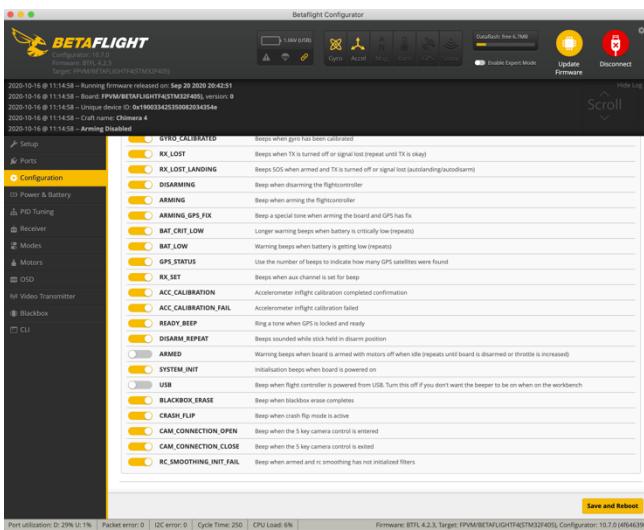
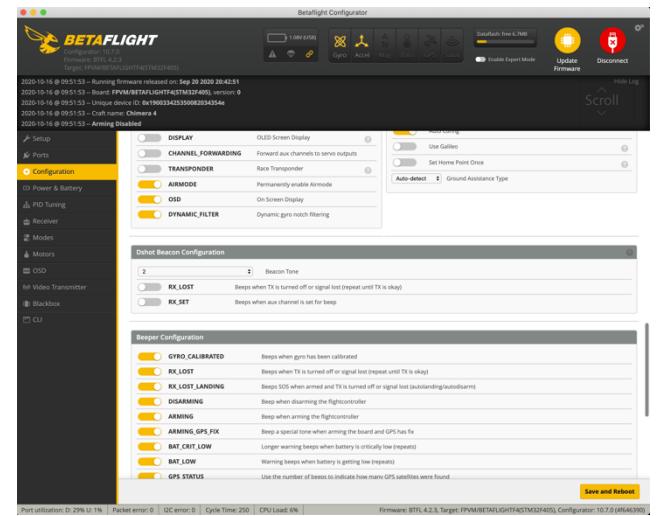
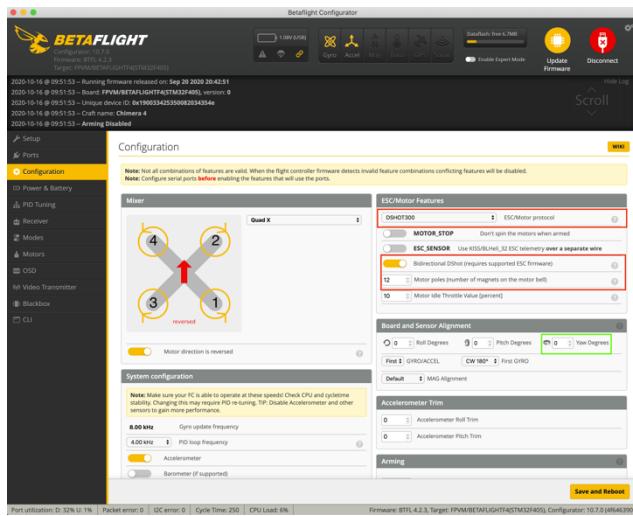
Betaflight setup for CHIMERA4 LR (Ports page)



- ❖ Verify you are setup like this if using the DJI transmitter:
- ❖ Serial Rx switch is set for UART1.
- ❖ MSP switch is set for UART2 (serial connection to Air Unit but as a master serial Port or MSP).
- ❖ GPS is set in peripherals for UART3

Betaflight setup for CHIMERA4 LR

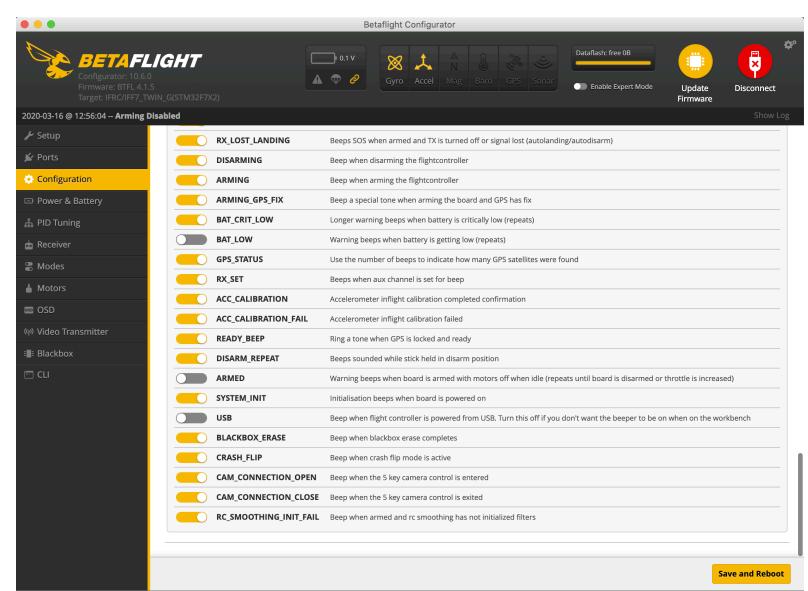
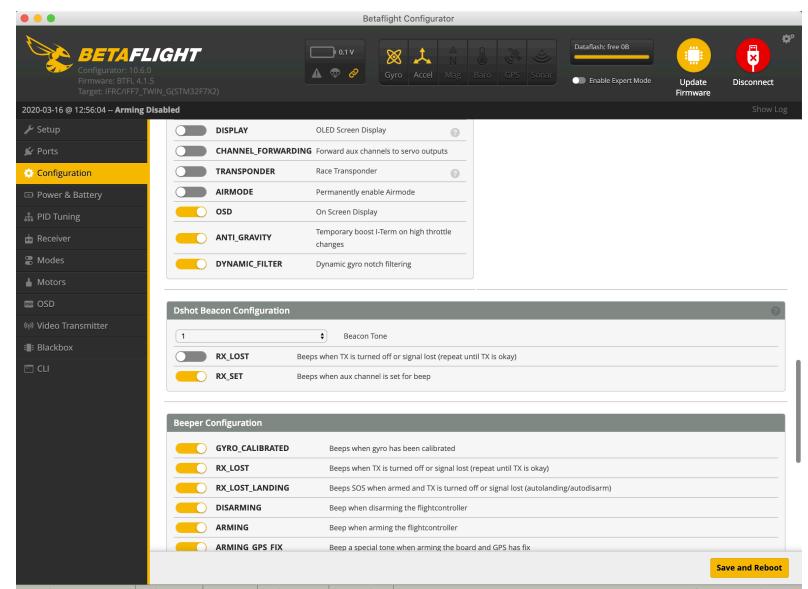
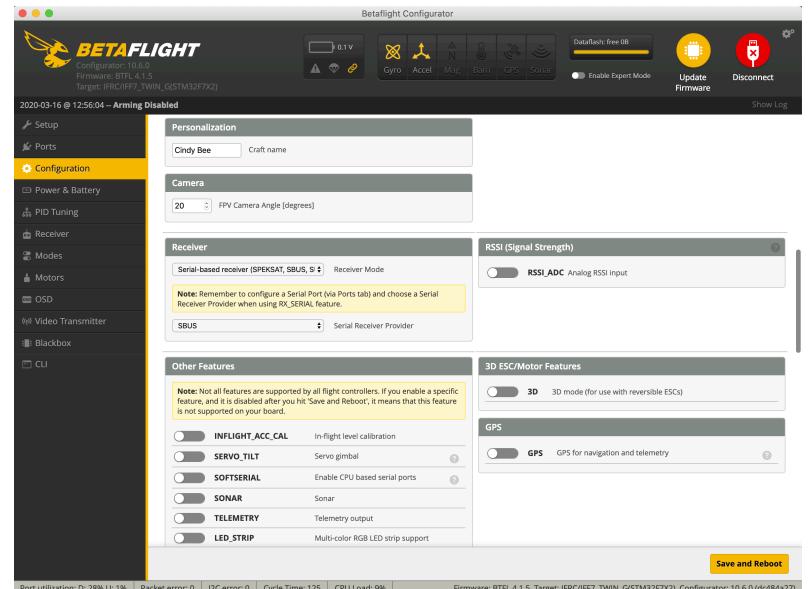
(Config page)



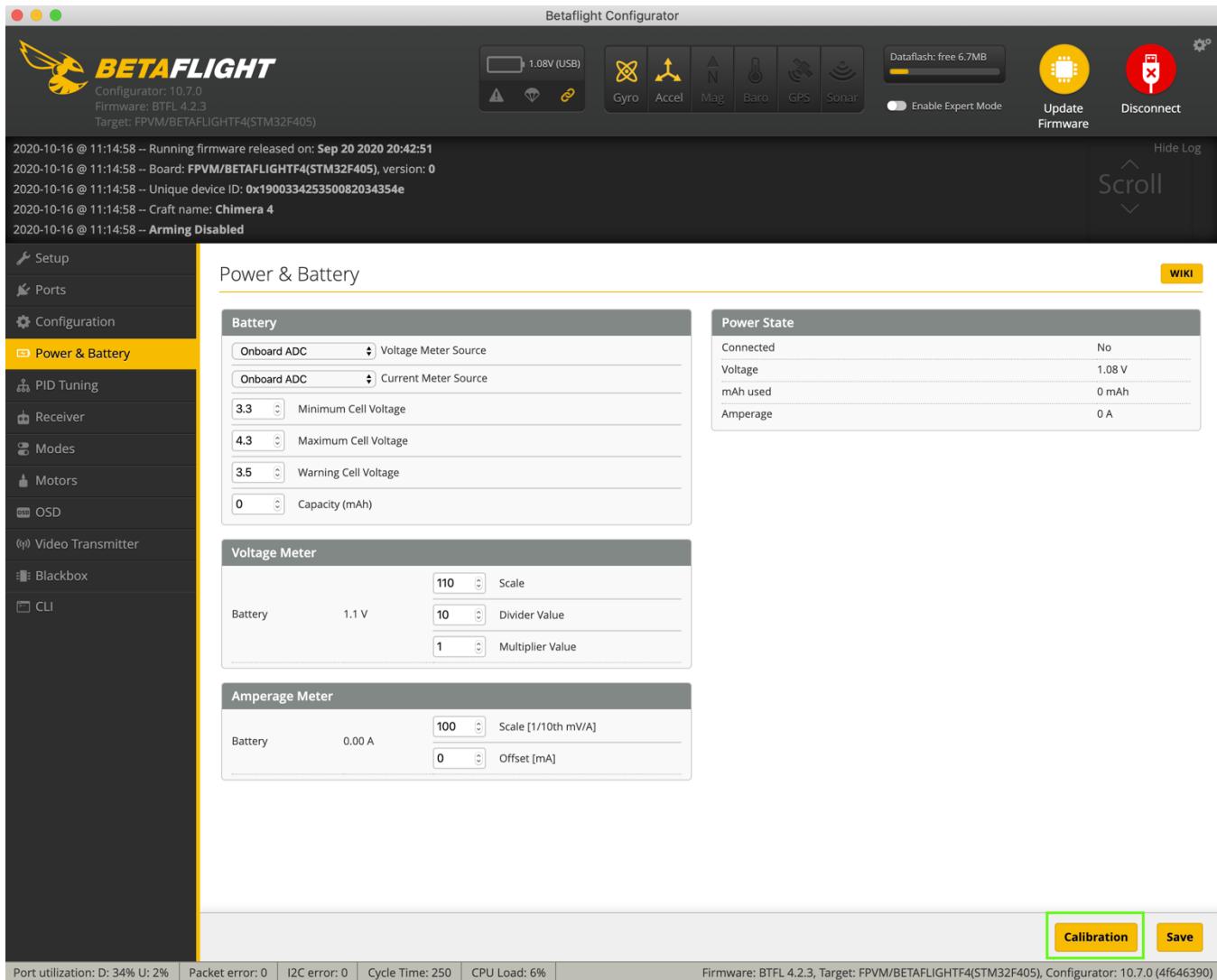
- ❖ Lot's of stuff here: check that the motor direction switch is set to **Reversed**.
- ❖ ESC Motor Features: **DSHOT300** is selected, BiDirectional Dshot switche is set to On. Motor poles should be set to 12 (very important).
- ❖ If on the setup page the quad didn't tilt the same way you moved it, you can adjust it here (**Yaw Degrees**).
- ❖ Let's be sure we are set to Crossfire, in the config page the Receiver box should say Serial-based receiver and Serial Receiver Provider is set to CRSF.

Betaflight setup for CHIMERA4 LR (Config pages)

- ❖ Turn off soft serial if it is set, as well as display and if following my setup, Airmode always on should be set to **off** (turned on in modes page).
- ❖ RX_Lost is optional.
- ❖ Dshot Beacon Configuration should be set to off for both switches as your Chimera LR has a dedicated buzzer. Save power. Motors (ESCs) will still beep after 10min on without input signals.
- ❖ I turn off Bat Low, as you cannot hear it while flying. Bat Critical is on so if after landing the battery is very low and needs a charge soon so it doesn't go below the voltage one can recharge from.
- ❖ Beep on Armed is unnecessary and wastes power. Turn it and the USB one off too. The buzzer during firmware flashing is annoying too lol.

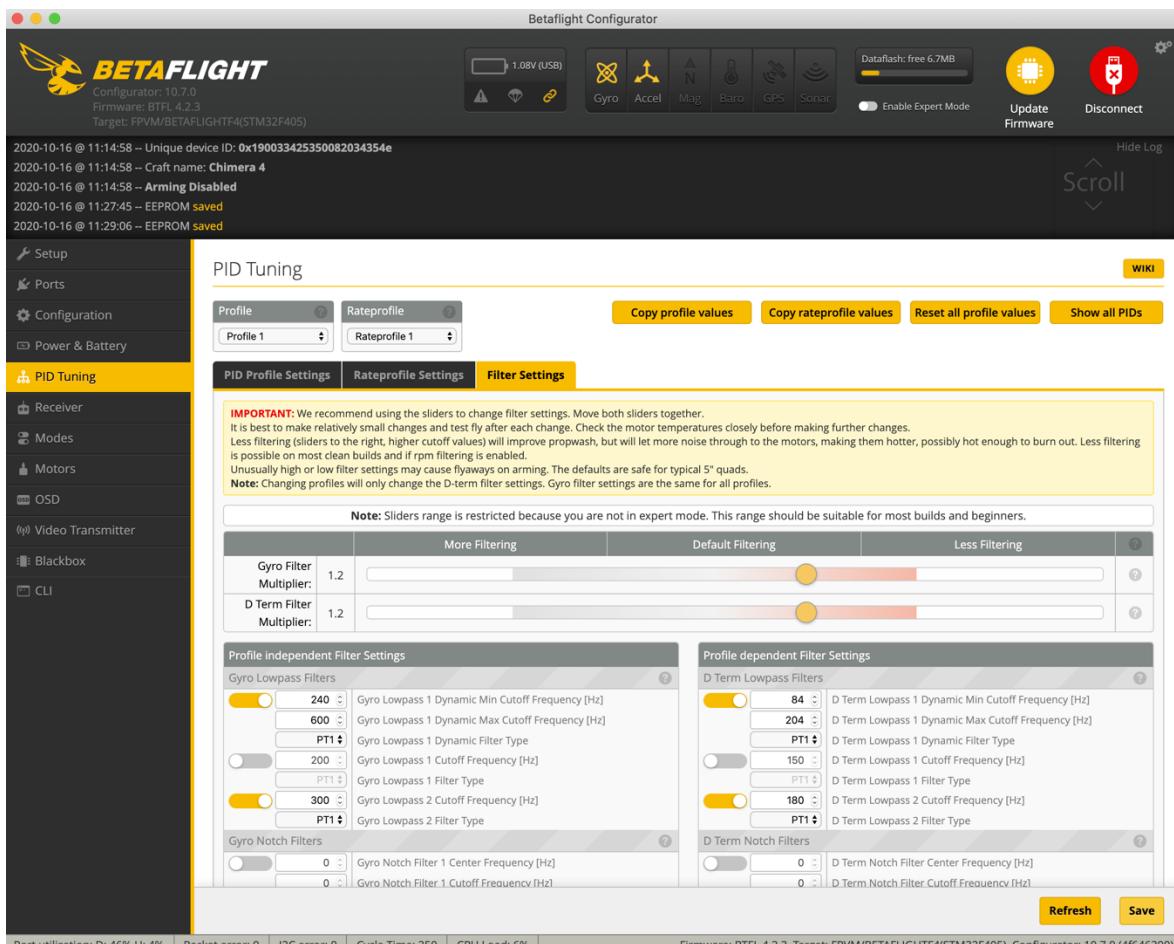
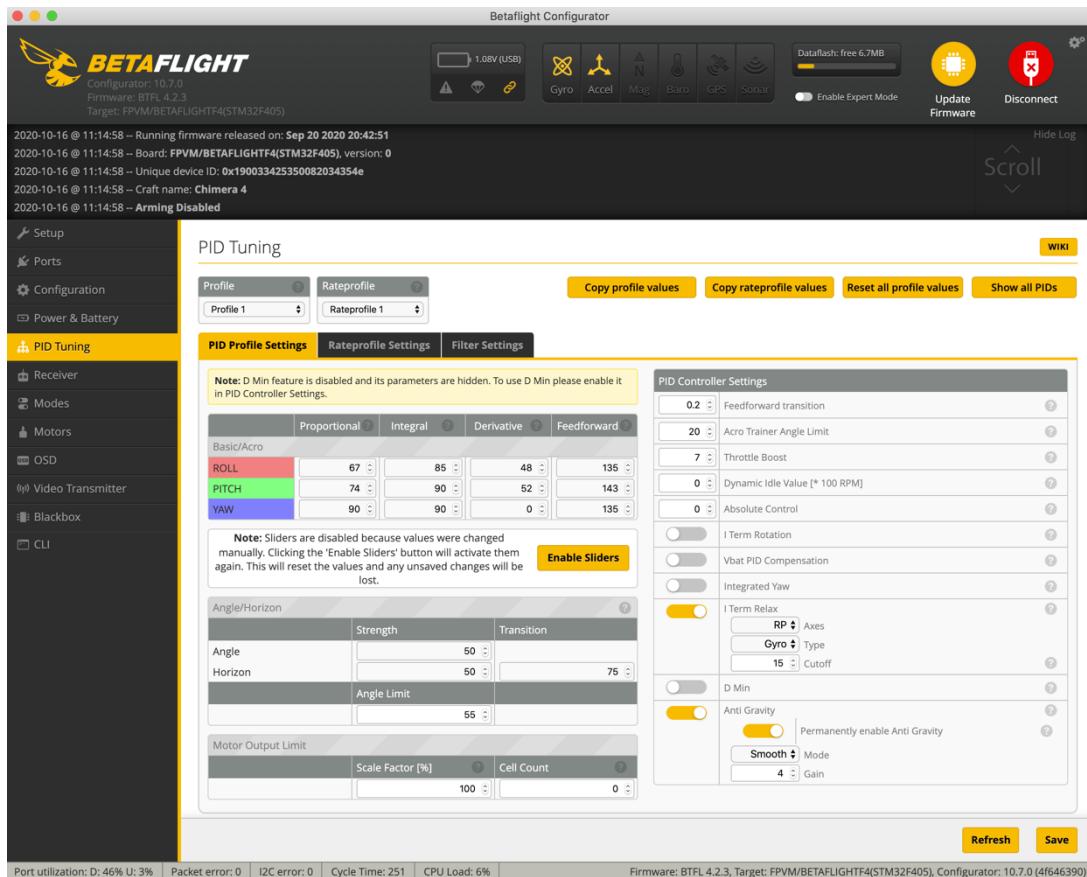


Betaflight setup for CHIMERA4 LR (Power & Battery)

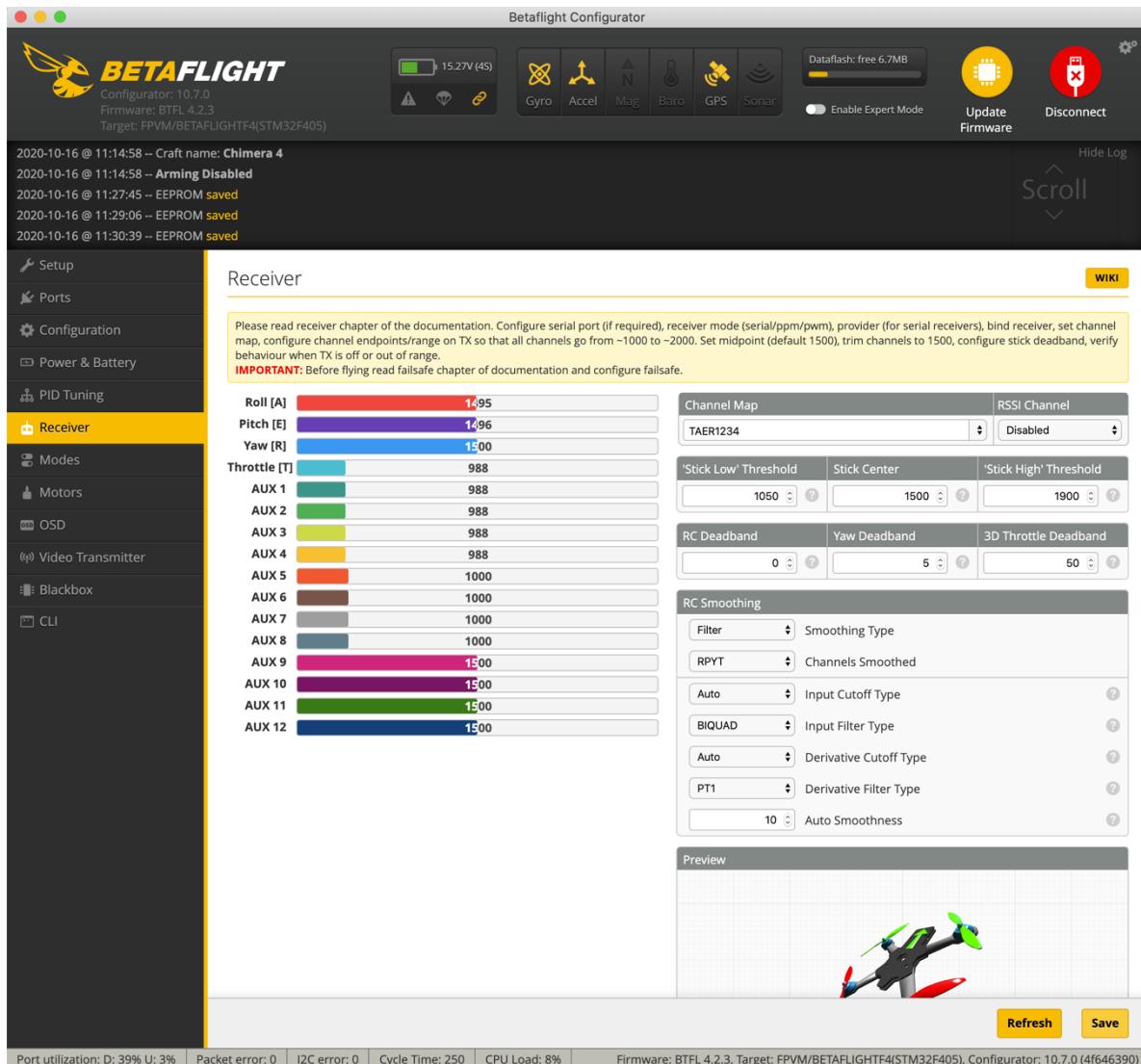


- ❖ Defaults are fine here for the CHIMERA4 LR
- ❖ You can now calibrate your power! it's very simple but you will need a digital multimeter (DMM). Follow the instructions after pushing calibration button to set.

Betaflight setup for CHIMERA4 LR (PID Tuning page)



Betaflight setup for CHIMERA4 LR (Receiver)



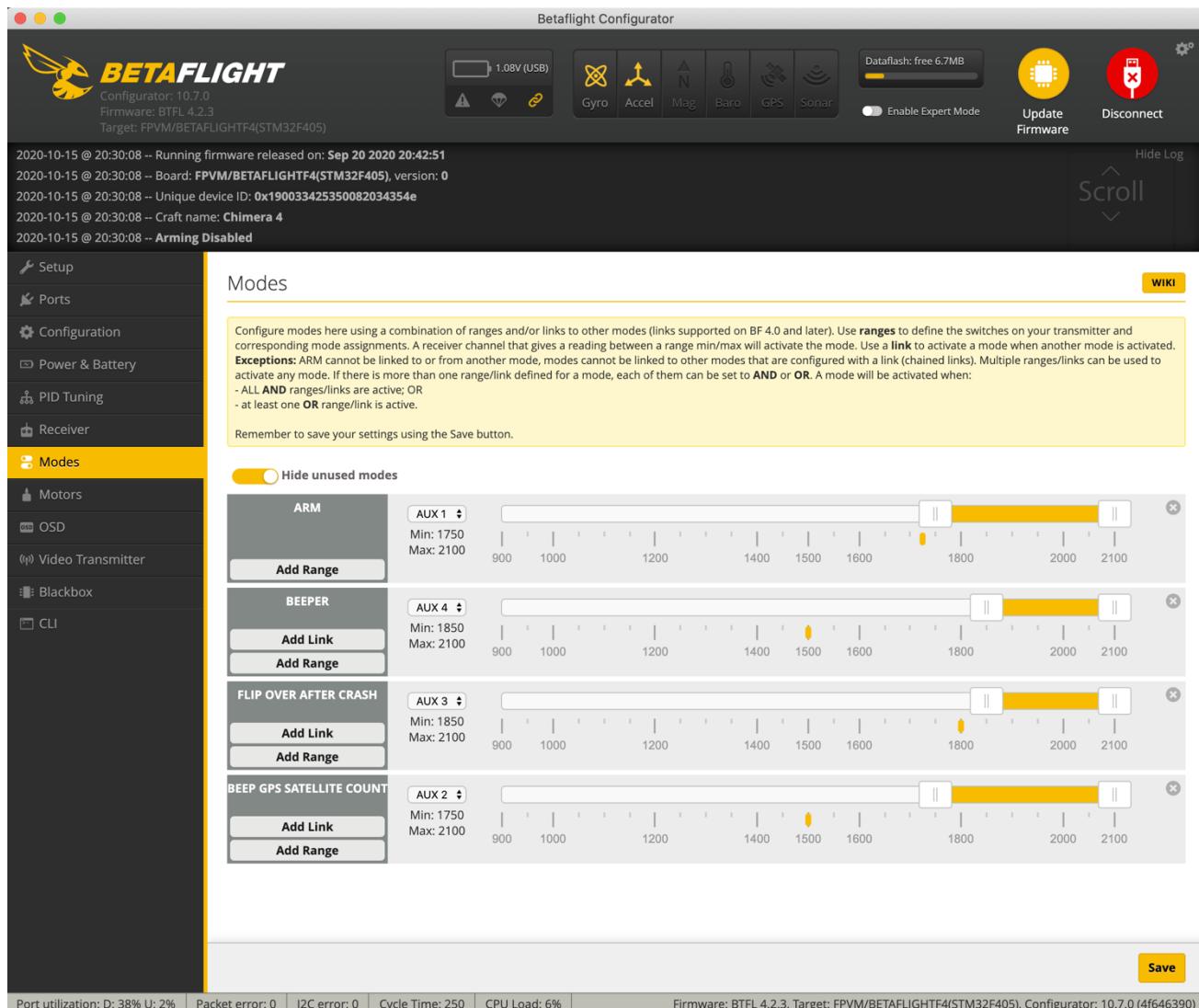
- ❖ Connect your CHIMERA4 LR to battery, power up your goggles and DJI Transmitter.
- ❖ With props off the CHIMERA4 and connected to transmitter as well as betaflight, verify the controls. Does the throttle work the correct control? Same for the rest and do the switches function?
- ❖ If the controls do not respond correctly (or the quad is spinning in the picture for this page) you may need to change the setting that shows something different to “TAER1234” if using the Tango2 transmitter (Jumper T16 with Micro xF module will probably need AEFR1234).

Betaflight setup for CHIMERA4 LR (Modes



- ❖ Your CHIMERA4 probably came configured with some controls that you can use like arm on SA. Here (shown on next page) is a useful setup for the Modes Aux Switches SA-SD. First is what switch does what and following that is the modes screen and the #aux settings you can paste and run in the CLI (don't forget to save) for my settings shown here
- ❖ Standard convention for transmitters is all switches should be in up or the forward position which is off when you power on (or off) the transmitter, this is sometimes called the safe position.
- ❖ Your three position switches SA, SB, SC, SD respond to their settings in the betaflight firmware in your CHIMERA4 which has been set as follows:
- ❖ Switch B (**SA**) is your **Arm switch**, move to the bottom position to arm the Cinbee. Props will spin if in Air mode at this point.
- ❖ Switch A (**SB**) is your **Flight Mode** Switch: the default (all the way up) is plain **Acro** mode, the middle is **Angle** Stability mode position, and the bottom position is full **Angle Stability Mode** (with Air Mode set to on always in Config page, and props will spin once armed) and this default is best for flips and rolls. New pilots may want to flip this around so that Angle Stability Mode is default (switch in up position) by sliding the Angle setting bar in the Modes page to the far left vs far right. Don't forget to save.
- ❖ Switch C (**SC**) is **Crash Recovery Arming mode** (a mouthful so its also known as turtle mode or turtle recovery mode. To use you must first disarm (SB is all the way up) then arm the Turtle (SC all the way down). Use your sticks to flip back over (see youtube videos on this subject to learn to use properly). Disarm Turtle Mode (SC all the way up). Now arm your Cinebee (SB all the way up) and fly home 😊 .
- ❖ Switch D (**SD**) is your **Bepper** that you enabled on the Config page, move switch SD down to the bottom position to use the motors to make sounds. Useful to confirm your transmitter is live as well as aid in lost craft recovery. Status beeps too.

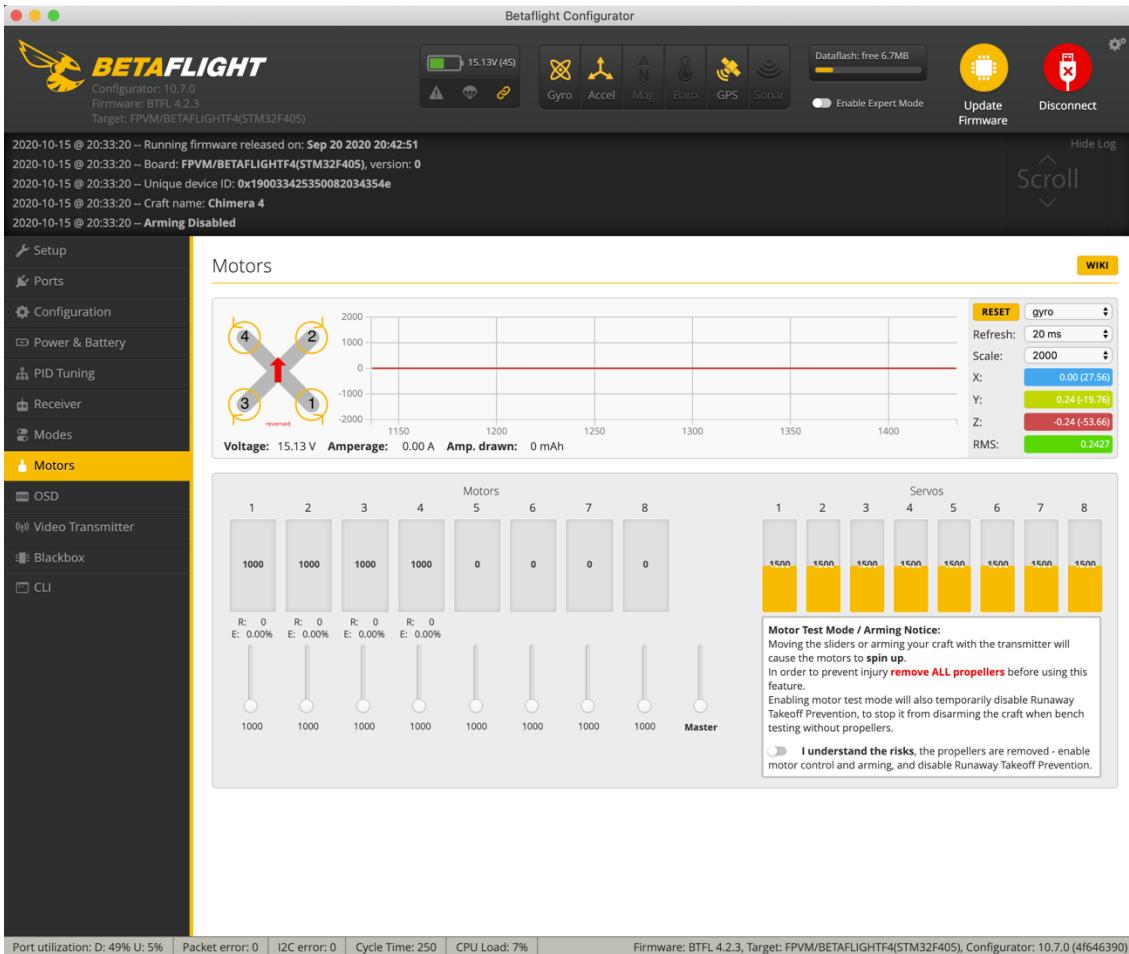
Betaflight setup for CHIMERA4 LR (Modes page)



- ❖ Copy and paste these #Aux settings (following) to set the modes this way, paste into the CLI, hit enter and don't forget to click **save** button after.
- ❖ Or just use the Betaflight GUI and configure like this by sliding the bars (also don't forget that save button at the bottom of the page) 😊

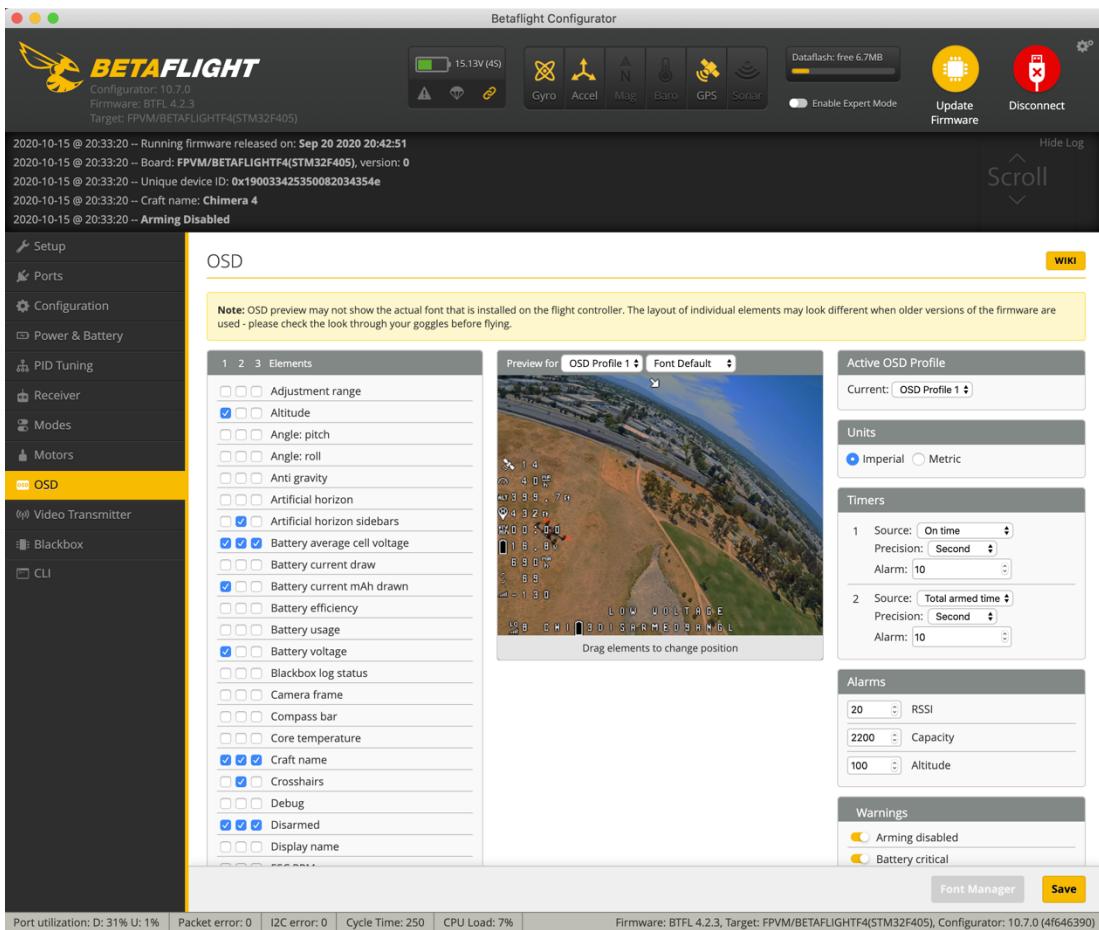
```
# aux
aux 0 0 0 1750 2100 0 0
aux 1 13 3 1850 2100 0 0
aux 2 35 2 1850 2100 0 0
aux 3 37 1 1750 2100 0 0
```

Betaflight setup for CHIMERA4 (Motors page)



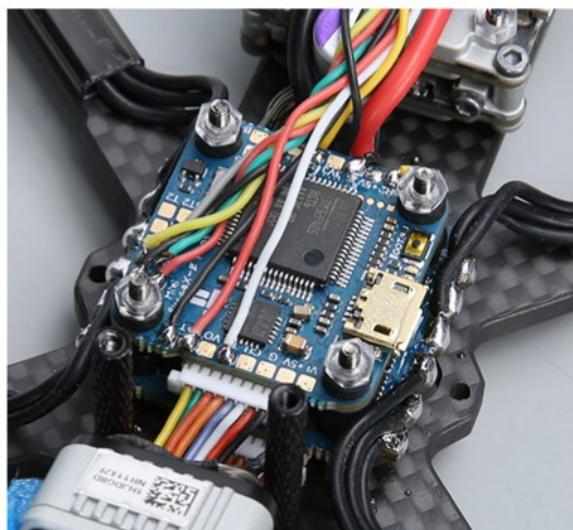
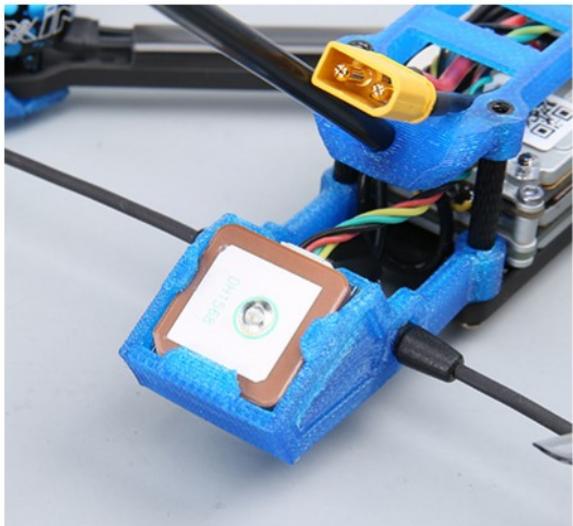
- ❖ **Props off!** or *Fingers off!* You have been warned lol. That's why the big message and a switch on this page. (flip that when stuck in MSP arming flag issue too)
- ❖ Note the direction shown for the motors and spin them slowly (just enough to spin) and verify **each motor is spinning in the correct direction**. If not, go back to BLHeli32 and correct (remember that setting?) then return here and test to verify.
- ❖ **DO NOT REV THE MOTORS!** Do not run up above 10-20% as you do NOT have the resistance from the props and the motors will quickly overheat and burn up.

Betaflight setup for CHIMERA4 LR (OSD page)



- ❖ Cut & Paste these to the CLI and then Save to quickly bring up these settings. Then edit and move around to your liking. Note bottom line looks a mess until you see it via the goggles.

```
set osd_units = IMPERIAL
set osd_warn_batt_not_full = OFF
set osd_warn_launch_control = OFF
set osd_warn_no_gps_rescue = OFF
set osd_warn_rssi = ON
set osd_warn_link_quality = ON
set osd_vbat_pos = 2368
set osd_rssi_pos = 14832
set osd_link_quality_pos = 14817
set osd_rssi_dbm_pos = 2464
set osd_tim_1_pos = 295
set osd_tim_2_pos = 2336
set osd_flymode_pos = 6642
set osd_g_force_pos = 384
set osd_throttle_pos = 2432
set osd_crosshairs_pos = 4301
set osd_ah_sbar_pos = 4302
set osd_current_pos = 320
set osd_mah_drawn_pos = 2400
set osd_craft_name_pos = 14820
set osd_gps_speed_pos = 2240
set osd_gps_lon_pos = 5
set osd_gps_lat_pos = 0
set osd_gps_sats_pos = 2208
set osd_home_dir_pos = 2062
set osd_home_dist_pos = 2304
set osd_altitude_pos = 2272
set osd_pid_pitch_pos = 463
set osd_warnings_pos = 14794
set osd_avg_cell_voltage_pos = 14823
set osd_battery_usage_pos = 489
set osd_disarmed_pos = 14825
set osd_esc_tmp_pos = 384
set osd_flip_arrow_pos = 509
set osd_stat_max_dist = ON
set osd_stat_endbatt = ON
set osd_stat_battery = ON
set osd_stat_max_g_force = ON
set osd_stat_max_esc_temp = ON
set osd_stat_min_link_quality = ON
set osd_stat_flight_dist = ON
set osd_stat_max_ft = ON
set osd_stat_total_time = ON
set osd_stat_min_rssi_dbm = ON
```



diff all

```
# version
# Betaflight / STM32F405 (S405) 4.2.3 Sep 20 2020 / 20:42:51 (2696b7c88) MSP API: 1.43
# config: manufacturer_id: FPVM, board_name: BETAFLIGHTF4, version: f92ddc38, date: 2020-04-
28T07:37:21Z

# start the command batch
batch start

# reset configuration to default settings
defaults nosave

board_name BETAFLIGHTF4
manufacturer_id FPVM
mcu_id 00190033425350082034354e
signature

# name: Chimera 4

# resources
resource PULLDOWN 1 NONE

# feature
feature -RX_PARALLEL_PWM
feature RX_SERIAL
feature GPS
feature TELEMETRY

# beeper
beeper -ARMED
beeper -ON_USB

# serial
serial 0 1 115200 57600 0 115200
serial 1 64 115200 57600 0 115200
serial 2 2 115200 9600 0 115200

# led
led 0 5,11::CTOBIW:0
led 1 6,11::CTOBIW:0
led 2 7,11::CTOBIW:0
led 3 8,11::CTOBIW:0
led 4 9,11::CTOBIW:0
led 5 10,11::CTOBIW:0

# aux
aux 0 0 0 1750 2100 0 0
aux 1 13 3 1850 2100 0 0
```

```
aux 2 35 2 1850 2100 0 0
aux 3 37 1 1750 2100 0 0

# vtxtable
vtxtable bands 6
vtxtable channels 8
vtxtable band 1 BOSCAM_A A FACTORY 5865 5845 5825 5805 5785 5765 5745 5725
vtxtable band 2 BOSCAM_B B FACTORY 5733 5752 5771 5790 5809 5828 5847 5866
vtxtable band 3 BOSCAM_E E FACTORY 5705 5685 5665 5645 5885 5905 5925 5945
vtxtable band 4 FATSHARK_F FACTORY 5740 5760 5780 5800 5820 5840 5860 5880
vtxtable band 5 RACEBAND_R FACTORY 5658 5695 5732 5769 5806 5843 5880 5917
vtxtable band 6 BAND_D D FACTORY 5362 5399 5436 5473 5510 5547 5584 5621
vtxtable powerlevels 5
vtxtable powervalues 25 100 200 400 600
vtxtable powerlabels 25 100 200 400 600

# rxfail
rxfail 6 s 1800

# master
set gyro_lowpass2_hz = 0
set yaw_spin_recovery = ON
set dyn_notch_width_percent = 0
set dyn_notch_q = 250
set dyn_notch_min_hz = 120
set dyn_notch_max_hz = 400
set dyn_lpf_gyro_min_hz = 300
set dyn_lpf_gyro_max_hz = 750
set acc_calibration = -13,43,321,1
set mag_hardware = NONE
set baro_hardware = NONE
set rc_smoothing_derivative_type = PT1
set serialrx_provider = CRSF
set blackbox_p_ratio = 16
set dshot_idle_value = 1000
set dshot_bidir = ON
set motor_pwm_protocol = DSHOT300
set motor_poles = 12
set current_meter = ADC
set battery_meter = ADC
set ibata_scale = 100
set beeper_dshot_beacon_tone = 2
set yaw_motors_reversed = ON
set small_angle = 180
set gps_provider = UBLOX
set gps_sbas_mode = AUTO
set gps_auto_baud = ON
set yaw_deadband = 5
set pid_process_denom = 2
```

```
set thrust_linear = 30
set osd_units = IMPERIAL
set osd_warn_batt_not_full = OFF
set osd_warn_launch_control = OFF
set osd_warn_no_gps_rescue = OFF
set osd_warn_rssi = ON
set osd_warn_link_quality = ON
set osd_vbat_pos = 2368
set osd_rssi_pos = 14832
set osd_link_quality_pos = 14817
set osd_rssi_dbm_pos = 2464
set osd_tim_1_pos = 295
set osd_tim_2_pos = 2336
set osd_flymode_pos = 6642
set osd_g_force_pos = 384
set osd_throttle_pos = 2432
set osd_crosshairs_pos = 4301
set osd_ah_sbar_pos = 4302
set osd_current_pos = 320
set osd_mah_drawn_pos = 2400
set osd_craft_name_pos = 14820
set osd_gps_speed_pos = 2240
set osd_gps_lon_pos = 5
set osd_gps_lat_pos = 0
set osd_gps_sats_pos = 2208
set osd_home_dir_pos = 2062
set osd_home_dist_pos = 2304
set osd_altitude_pos = 2272
set osd_pid_pitch_pos = 463
set osd_warnings_pos = 14794
set osd_avg_cell_voltage_pos = 14823
set osd_battery_usage_pos = 489
set osd_disarmed_pos = 14825
set osd_esc_tmp_pos = 384
set osd_flip_arrow_pos = 509
set osd_stat_max_dist = ON
set osd_stat_endbatt = ON
set osd_stat_battery = ON
set osd_stat_max_g_force = ON
set osd_stat_max_esc_temp = ON
set osd_stat_min_link_quality = ON
set osd_stat_flight_dist = ON
set osd_stat_max_fft = ON
set osd_stat_total_time = ON
set osd_stat_min_rssi_dbm = ON
set debug_mode = GYRO_SCALED
set gyro_rpm_notch_q = 700
set name = Chimera 4
```

profile 0

```
# profile 0
set dyn_lpf_dterm_min_hz = 105
set dyn_lpf_dterm_max_hz = 255
set dyn_lpf_dterm_curve_expo = 7
set dterm_lowpass2_hz = 225
set vbat_sag_compensation = 100
set anti_gravity_gain = 4000
set feedforward_transition = 20
set itemr_relax_type = GYRO
set itemr_windup = 70
set yaw_lowpass_hz = 100
set throttle_boost = 7
set throttle_boost_cutoff = 25
set p_pitch = 74
set d_pitch = 52
set f_pitch = 143
set p_roll = 67
set d_roll = 48
set f_roll = 135
set p_yaw = 90
set f_yaw = 135
set d_min_roll = 0
set d_min_pitch = 0
set ff_spike_limit = 70
set ff_smooth_factor = 20
set ff_boost = 25
```

profile 1

profile 2

```
# restore original profile selection
profile 0
```

rateprofile 0

```
# rateprofile 0
set tpa_rate = 0
set tpa_breakpoint = 1250
```

rateprofile 1

rateprofile 2

rateprofile 3

rateprofile 4

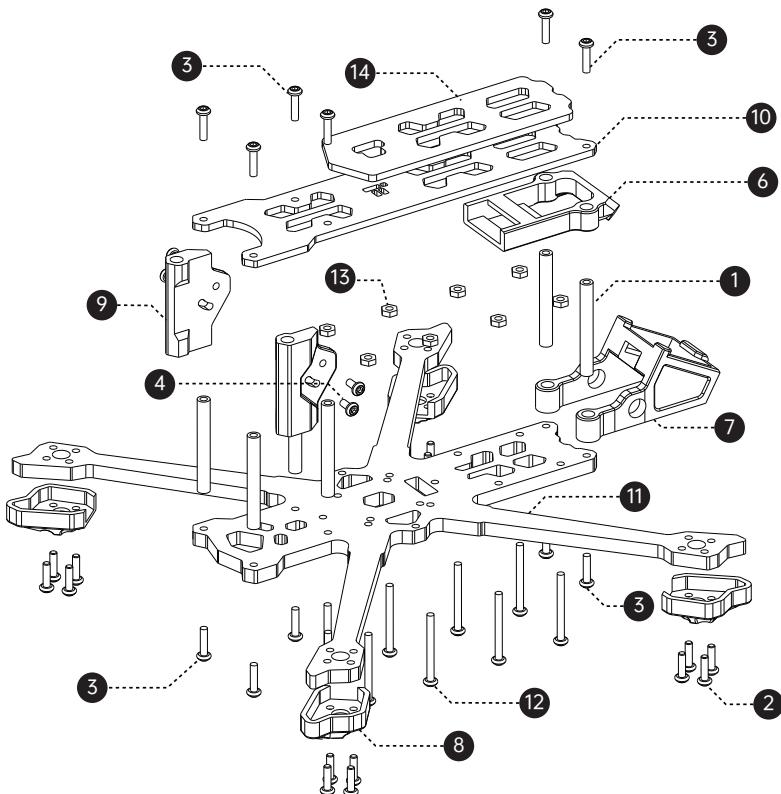
rateprofile 5

```
# restore original rateprofile selection  
rateprofile 0
```

```
# save configuration  
save  
#
```

Chimera4
机架组装示意图
Frame Assembly Guide

1. M2X28 网纹铝柱 M2X28 Al.standoff x6
2. M2X7 内六角螺丝 M2X7 hex screw x16
3. M2X8 内六角螺丝 M2X8 hex screw x12
4. M2X4 内六角螺丝 M2X4 hex screw x4
5. M1.6X20 内六角螺丝 M1.6X20 hex screw x4
6. 图传天线座 Antenna/RX TPU x1
7. GPS+T型天线座 GPS+T-Type Antenna TPU x1
8. 脚垫打印件 Arm Guard TPU x1
9. 侧板打印件 Side plate print part x1
10. TPU spacer x1
11. Top plate(2mm) x1
12. Bottom plate(4mm) x1
13. M2X20 内六角螺丝 M2X20 hex screw x8
14. M2六角尼龙螺母 M2Nylon nut x8
- 电池防滑垫 Battery pad x2



iFlight SucceX-E Mini F4 Wiring diagram

