FLARE

Quick Start Guide

STEADI DRONE

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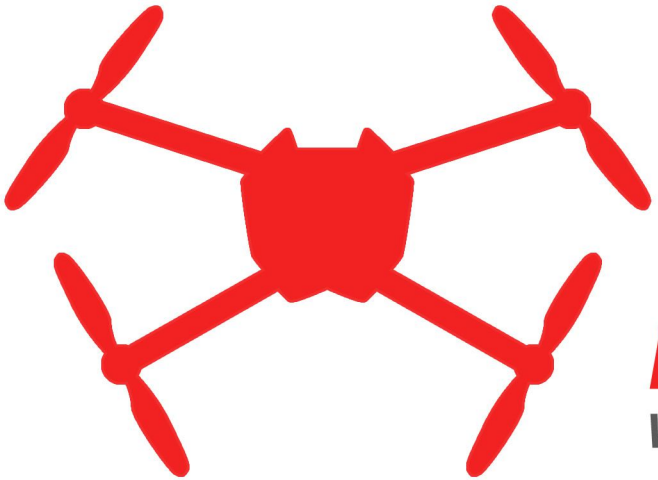

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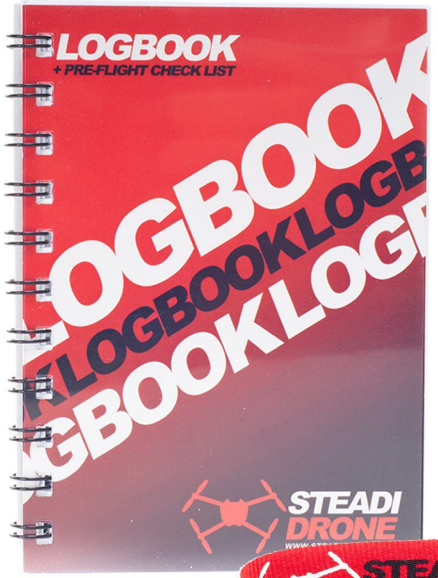
WHAT'S IN THE BOX

1. Flight logbook.
2. Lanyard & sticker.
3. Spares incase you need to do a minor repair.
4. Extra silicone dampeners.
5. Spanner to tighten your props.
6. APC 12” propeller pairs.
7. Landing gear holder with landing gear.
8. SteadiDrone FLARE.



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WHAT'S IN THE BOX

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1. LiPo Battery charger with cables.
2. Radio charger.
3. Plug adapter.
4. LiPo battery
5. Data radio for the PIXHAWK.
6. Phone/tablet and PC cable for data radio.
7. Other PIXHAWK extras.
8. FLVSS LiPo sensor/checker.

BEFORE FLYING

The FLARE RTF comes setup and tested. The only form of setup you would need to do is a Live Compass Calibration for the flight controller.

Before you start you need the following:

1. Computer with Mission Planner installed. Download Mission Planner here: http://ardupilot.com/downloads/?did=82

2. USB Cable. This is included in the RTF kit.

3. Your SteadiDrone. You do not need to have the battery connected during this process. If you do, please remove your propellers for safety.

Now you are ready to perform the Live Compass Calibration. If you are unfamiliar with this watch the instruction video here: http://copter.ardupilot.com/wiki/ac_compasssetupupadvanced/

Why do I need to do this?

Compass readings are effected by various factors like geographical location and electro magnetic interference. These change when you change location or when the layout of the electronics on the unit changes.

When do I need to do this?

When you have moved to a new flying location or if you add, remove or move any electronics on the unit.

FOLDOUT THE ARMS

1. Unclip the front arms and move them forward.

2. Clip the front arms into the front outer mount.

3. Swing the rear side outer mount backwards.

4. Unclip the rear arms and clip into the rear side outer mount.

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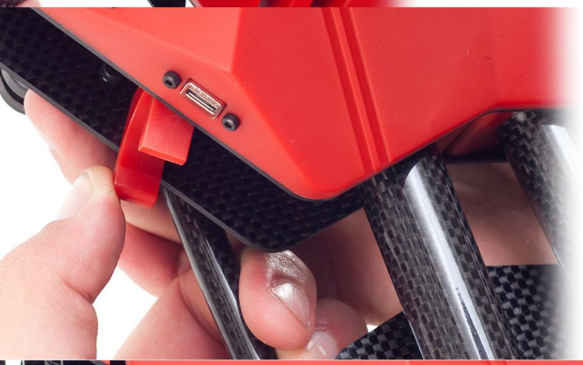

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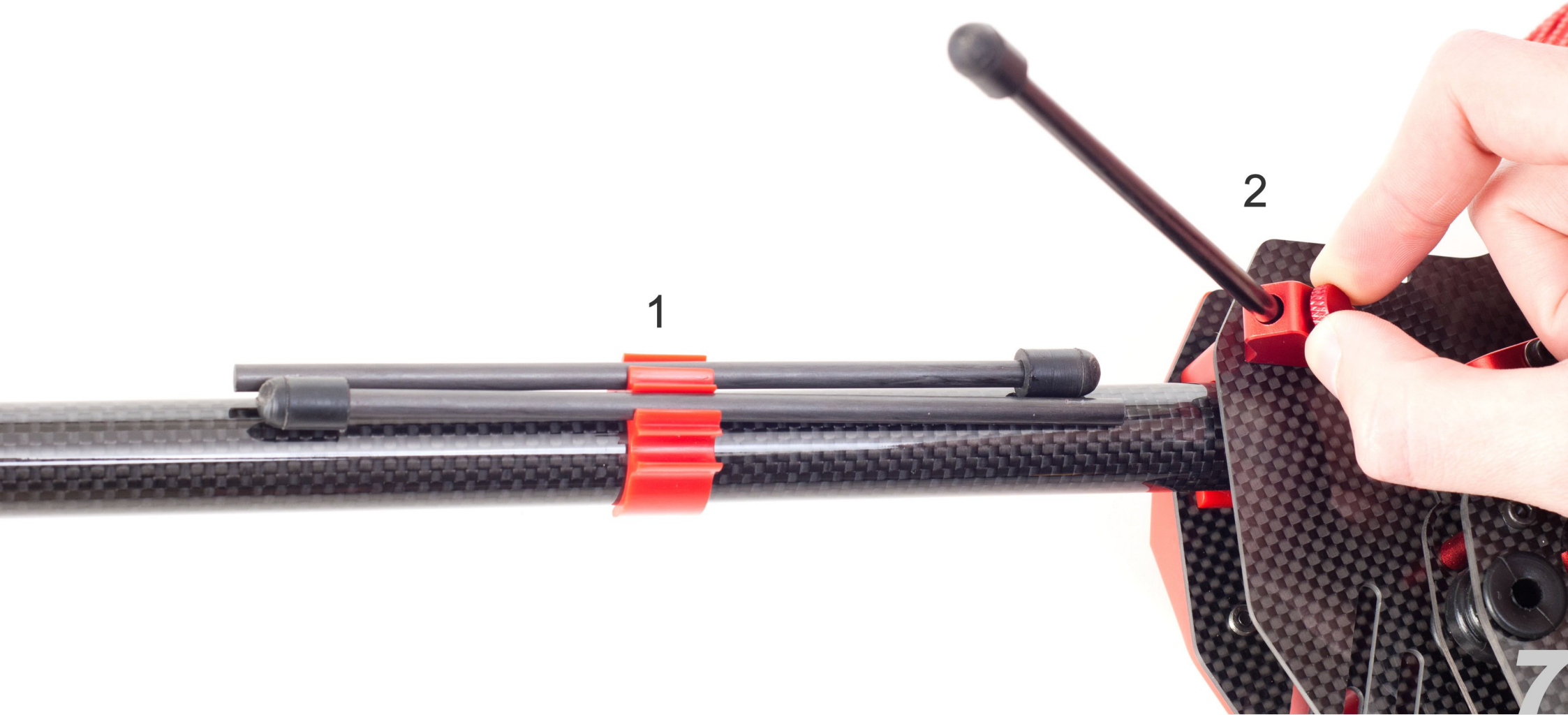
LANDING GEAR

1. Unclip the landing gear from the landing gear holder.

2. Insert the landing gear into the landing gear mount and secure with the thumb screw.



PROPELLERS

1. Select and fit the correct prop adapter rings to the props.

2. Match the props up with the correct motors.

3. Fit the prop onto the motor. It is normal for the adapter ring to go on quite snug, this helps prevent any vibration between the prop and the motor.

4. Take careful note of the position of the prop, washer and nut on the prop holder.

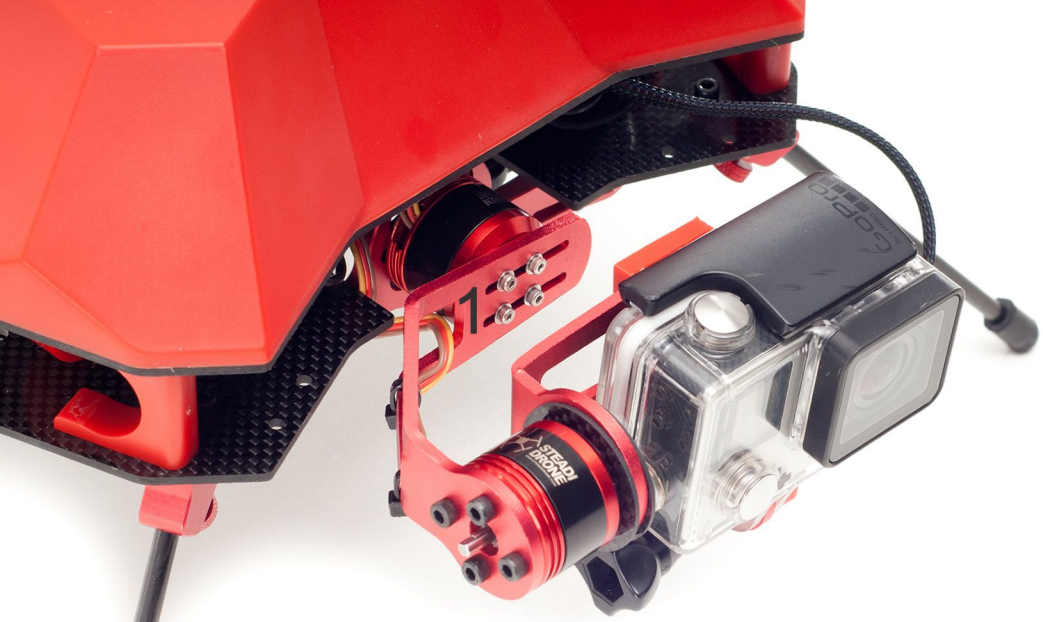
5. Tighten the prop onto the prop holder with the supplied spanner. Do not over tighten them, the motors have CW and CCW threaded prop holders to keep the props from loosening.

CAMERA FITMENT

1. Fit the camera with the supplied nut as shown here. The screw you would have received with your GoPro.

2. After fitting the camera the gimbal should be balanced for optimal performance. If you are using a Hero 3+/4 case the gimbal should already be in balance.

CAMERA FITMENT



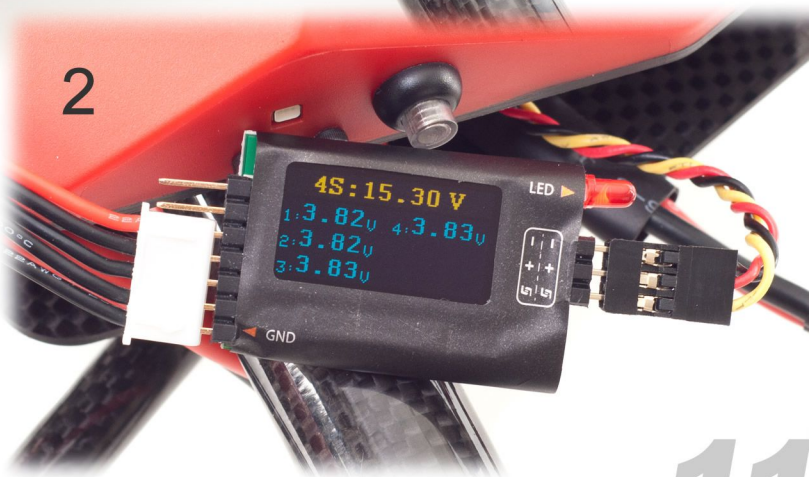
1-3. The performance of a brushless gimbal is greatly reliant on the balance of the gimbal. The balance changes from camera to camera so it will need to be adjusted for your specific camera. The gimbal can be adjusted in these 3 places.

When the camera is balanced it should more or less stay in any position you put it in, also when pointing the camera up and down.

BATTERY

1. Place the LiPo battery on the battery plate and secure with the Velcro strap.

2. Plug the FLVSS sensor in as shown here. The sensor will display the LiPo battery's overall and cell voltages and will also send this information to your radio.



* For more on LiPo batteries, charging and voltages see the charging pages.

POWER UP

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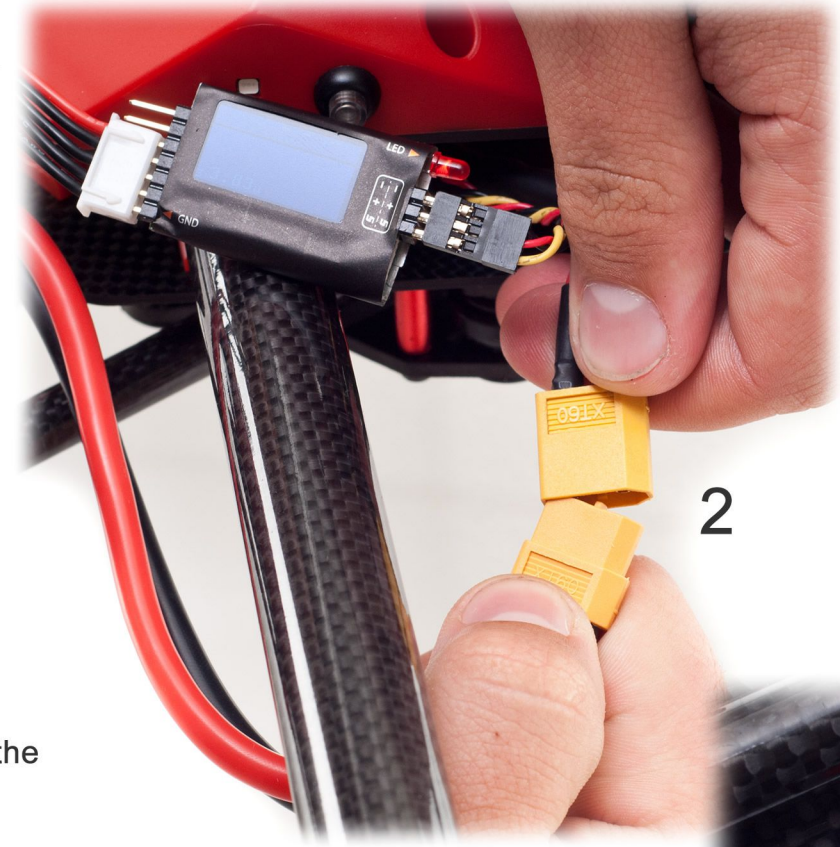

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When powering up the MAVRIK, it is important to do it in the correct order:

1. Switch on the radio. Make sure all the switches are forward and the throttle is at 0%.

2. Connect the FLVSS and the LiPo battery.

3. If you are not going to use the gimbal and you do not have a camera fitted, switch it off.

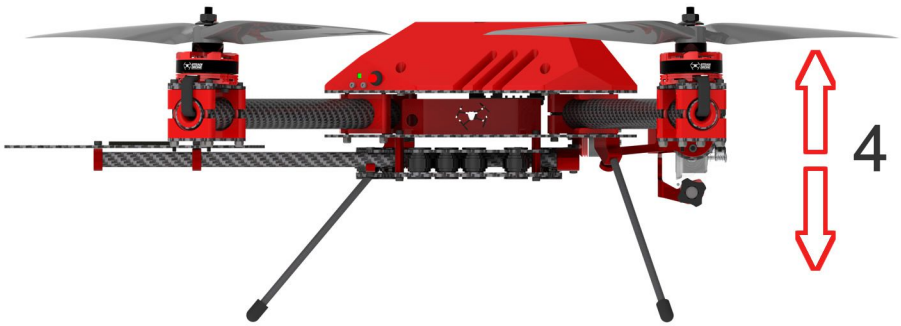
FLYING BASICS

1-2. To ARM the drone press and hold the safety button (1) on the dome until the flashing red LED turns solid red. Now, take a few steps back and move the left stick on the radio to the bottom right corner for about 4 seconds. The motors will spin up and the drone is now armed.

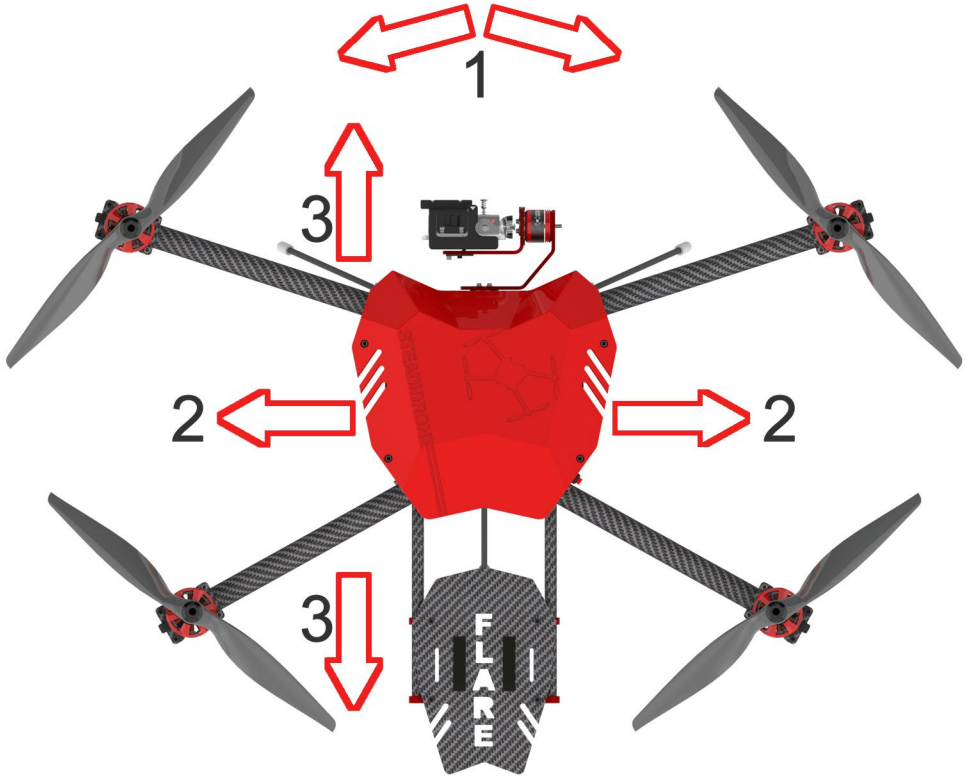
3. To disarm the drone, move the throttle stick to the bottom and then to the left bottom corner and hold it there for about 4 second and the motors will stop. The drone is now disarmed.

4. This knob (G) controls the gimbal. Turning the knob CW will point the camera down.

5. This switch (marked RED) controls the flight modes of the drone.



FLYING BASICS

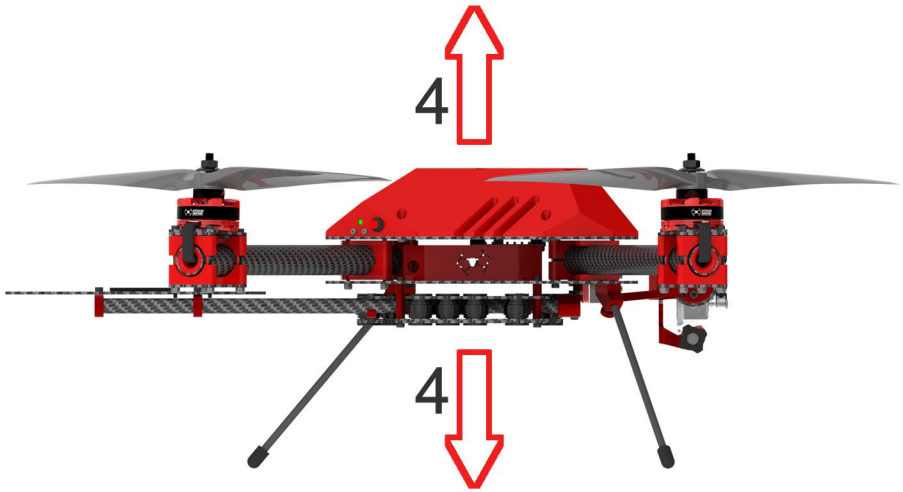


1. The RUDDER stick controls the LEFT to RIGHT turning of the drone. Moving the stick LEFT will turn the drone LEFT horizontally.

2. The AELERON stick controls the LEFT to RIGHT movement of the drone. Moving the stick LEFT will move the drone LEFT.

3. The ELEVATOR stick controls the FORWARD and BACWARD movement of the drone. Moving the stick FORWARD will move the drone FORWARD.

4. The THROTTLE controls the speed of the motors and thus the rate of climb and descent. Moving the stick up above 50% will cause the drone to climb.



CHARGING

LiPo batteries are shipped at a storage charge of 14.8V or 3.7V/cell and should be charged before use. A fully charged 4S LiPo would be 16.8V or 4.2V/cell. Batteries should not be depleted below 13V or 3.25V/cell. When flying, remember to allow yourself enough battery life to land safely, we would suggest 14.4V or 3.6V/cell for this purpose.

Charging the LiPo battery:

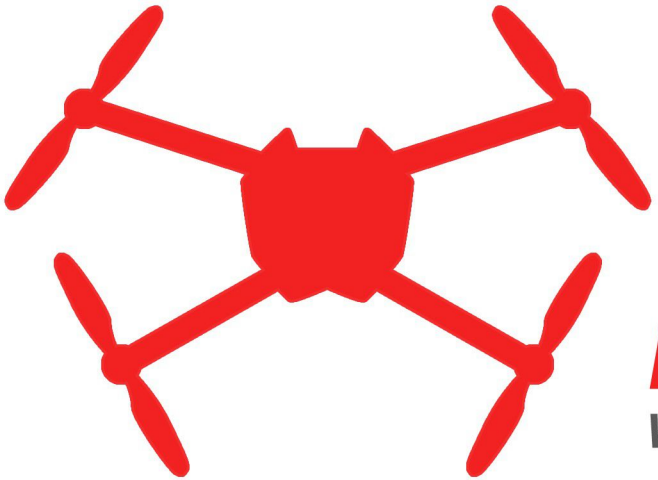
1. Power the charger by connecting it to mains power or powering it from a battery with the supplied auxiliary cord.

2. Connect the LiPo's balance plug to the appropriate port on the charger.

3. Connect the LiPo's power lead to the charger's charging leads.

4. Charge the LiPo to these specifications:

LiPo battery type
Balance charge
5A
14.8V (4s)



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