

# VELCOME TO ROCKET DRONES

This mini course is covers basic safety requirements, drone handling and is designed to get students up and flying with our Classroom Drone. Please follow all safety guidelines and follow all commands provided by your instructor.

Safety is paramount when handling drones, especially drones in the classroom. Ensure all safety equipment is used and in place before operating any drone.



Necessary Equipment:

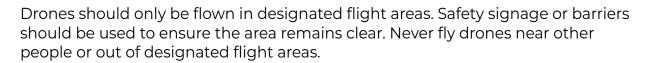
Safety goggles or glasses Safety signage Rocket Drones Classroom Drone

Rocket Drones Controller

Battery and tester



Safety Checks and Drone Inspection:



FAT SHARK

Inspect drone, propellers, motors and connections for any damage and ensure motors spin freely.



Inspect and verify battery voltage:

Fully charged batteries should read between 4.20v to 4.35v.



Wearing Safety Glasses:

Always wear safety goggles when operating the drone to protect your eyes from any potential harm.

Ensure loose clothing or long hair is secured to prevent entanglement with properllers.

Always follow preflight checklists and safety guidleines put into place by Rocket Drones and your local school administration.



# PREFLIGHT CHECKLIST

Site Safety Inspection	
Designate flight area	
Place signage and ensure	
area remains clear	
Preflight Inspections	
Premgnt inspections	
Inspect drone for any damage	
Debris or hair in the motors	
Inspect battery and verify voltage	
Insert battery until fully seated	
Connect and verify battery	
Apply safety gear	

### **CLASSROOM DRONE**

### **Binding Procedure:**

Each pilot should perform the Preflight Checklist. Then have the first pilot power on their controller by pressing the power button.



Only power on one drone at a time.



Have that same pilot power on their drone by pressing the "Power" button of their drone for 3 seconds.



Now have that pilot push the left stick up and down until the controller beeps and the drone lights go solid.



Repeat the binding procedure, one student at a time, until all controllers and drones are bound properly.

If a controller is bound to more than one drone, please power off those drones and controller and restart these steps again.



## **Arming Motors:**

There are two methods to arm a motor:

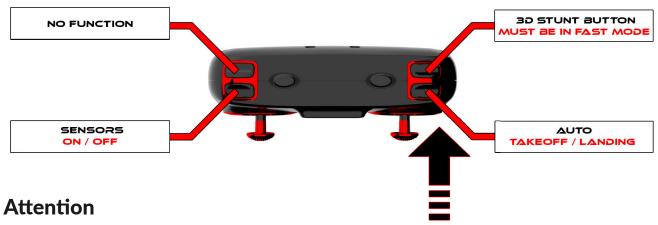
#### Method: 1

Move the left stick (throttle) fully up, letting it come back to the middle and the motors will start spinning.



#### Method: 2

Place the drone on a flat-level surface and press the "auto take off/land" button. The drone will take off, and hover at the preset height.



- If the drone goes out of control range, you'll notice the indicator lights start flashing slowly. After that, the drone will slowly descend to ensure it stays within the range.
- If the transmitter turns off or the transmitter's battery runs low, the drone will slowly descend. Turn on the transmitter again, re-pair the unit and continue to fly.



### **Disarming Motors:**

There are three methods to disarm a motor;

#### Method: 1

Push the left stick (throttle) fully down and hold it there for 2-3 seconds and the motors will stop spinning.



#### Method: 2

Push both sticks simultaneously (the left stick to the bottom-right corner and the right stick to the bottom-left corner) and hold for 1 second and the motors will stop spinning.



Method: 2 can also be used during flight if a rogue drone occurs. The drone will safely fall to the ground for retrieval.



#### Method: 3

After the drone is in a stable hovering position, press the "auto take off/land" button and the drone will slowly land. Motors will be automatically disarmed.

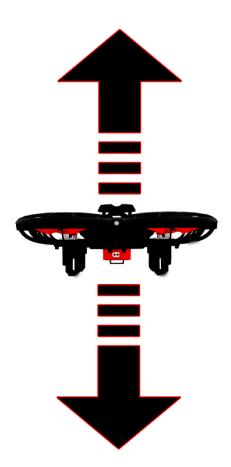


# BASIC FLIGHT CONTROLS

### Throttle/Altitude Control:

When the left stick (throttle) is moved up / down, the drone will ascend/descend.

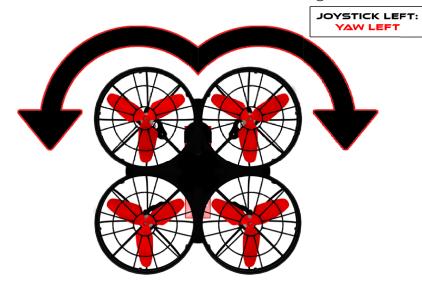






# Yaw Rotation:

When the left stick (throttle) is moved left/right the drone will rotate to the left or right.

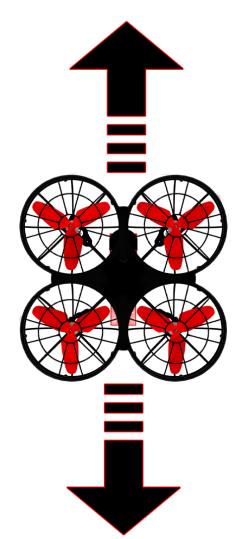




# Pitch Control:

When the right stick is moved up/down the drone will fly forward/backward.







### **Roll Control:**

When the right stick is moved left/right the drone will fly to the left/right.





# BATTERIES:

**Inspect Your Battery Regularly:** Regularly check your batteries for any peculiar smells, abnormal temperatures, deformation, or discoloration. If you notice any of these, stop using the battery immediately and replace it to ensure safety. If you notice a swollen battery, mark it as to be disposed and set inside the fire resistance lithium battery bag.

**Clean Battery Connectors :** Keep the battery connectors clean. Use a dry cloth to wipe them before use. Dirty connectors can cause energy loss and difficulty in charging.

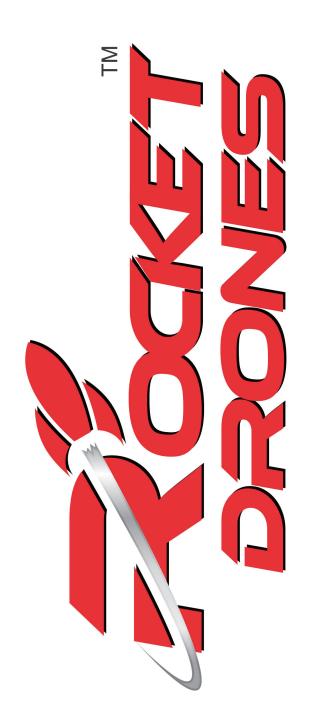
#### Safe Disposal:

Improper disposal of batteries can be a fire hazard. To safely dispose of a battery, follow these steps :

- Fully discharge the battery before disposal by flying battery to exhaustion. The battery tester can also be used to discharge a battery as well.
- · Use tape to cover the battery output connector to prevent accidental short circuits.
- · Always check and follow local regulations for proper battery disposal or recycling.

#### Additional Precautions for Battery Use and Charging:

- Do not immerse the battery in water. Store it in a dry area if not used for an extended period.
- · Keep batteries away from children. Swallowed batteries require immediate medical attention.
- · Do not use or store batteries near heat sources, microwave ovens, or open flames.
- · Only use a charger that meets the battery's specifications when charging.
- · Never throw a battery into a fire or heat it.
- Avoid using or storing batteries in extremely hot environments, such as in cars under direct sunlight or hot weather, as this can affect battery performance and lifespan.





DRONE FLIGHT IN PROGRESS
EYE PROTECTION REQUIRED
BEYOND THIS POINT DRONE FLIGHT IN