

# ZERO-X<sup>®</sup>

... BLITZ ...



## DRONE USER MANUAL

PRODUCT CODE: ZX-BTZ

[www.zero-x.com.au](http://www.zero-x.com.au) • [www.zero-x.co.nz](http://www.zero-x.co.nz)



<b>1</b>	<b>Welcome .....</b>	<b>4</b>
	Before you get up in the air .....	4
	General Safety .....	4
	Battery Safety .....	5
<b>2</b>	<b>Introduction.....</b>	<b>6</b>
	2.1 Package Contents .....	6
	Fig 2.1.1 .....	6
	2.2 Product Overview .....	7
	Blitz Drone.....	7
	Fig 2.2.1 .....	7
	Remote Control .....	8
	Fig 2.2.2 .....	8
<b>3</b>	<b>Setting up you Blitz Drone .....</b>	<b>9</b>
	3.1 Charging the Battery.....	9
	3.2 Installing the Battery .....	9
	Fig 3.2.1 .....	9
	3.3 Installing a Micro SD Card (Micro SD Card not included) .....	10
	Fig 3.3.1 .....	10
	3.4 Remote Control .....	10
<b>4</b>	<b>Flight Safety.....</b>	<b>10</b>
	4.1 Flying your Blitz Drone .....	10-11
	Fig 4.1.1 .....	10
	Fig 4.1.2 .....	11
	4.2 Controlling you Blitz Drone.....	12
	Basic Controls .....	12
	Fig 4.2.1 .....	12
	4.3 Speed Modes.....	12-13
	Low Speed.....	12
	Fig 4.3.1 .....	12
	High Speed .....	13
	Fig 4.3.2.....	13
	Stunt Mode .....	13
	Fig 4.3.3.....	13
	4.4 Using you Camera.....	13
	Shooting Video .....	13
<b>5</b>	<b>Maintenance .....</b>	<b>14</b>
	5.1 Cleaning .....	14
	5.2 Rotor Blade Installation and Replacement Guide .....	14
	Fig 5.2.1 .....	14
<b>6</b>	<b>Specifications .....</b>	<b>15</b>
<b>7</b>	<b>Warranty.....</b>	<b>15</b>

## 1. WELCOME

Thanks for purchasing a Zero-X Blitz Drone, get ready to have the time of your life! We're sure your Zero-X Blitz drone will bring you a world of great experiences in the air. Please take the time to read the following safety warnings and operating instructions carefully.

### BEFORE YOU GET UP IN THE AIR

Unwind and connect the charging cable to the Lithium polymer balance charger and then plug the Lithium polymer balance charger into a power outlet using the included power cord. When the charger is powered the 3 LEDs will slowly flash green and red.

Once your Lithium polymer balance charger is set up and powered, connect the charging cable to the Blitz battery via the port labelled "Charger". When the Blitz battery is charging the LEDs on the charger will shine red, once charging is complete all 3 LEDs will change from red to green.

While your Blitz drone is charging please take the time to read the instructions and familiarise yourself with the controls, maintenance and operation of the Zero-X Blitz Racing Drone.

### GENERAL SAFETY

Please familiarise yourself with your local legislation regarding drone usage before you begin using your Zero-X Blitz drone. Included in the package contents of your Zero-X Blitz drone are the Australian CASA guidelines, please read carefully and understand this information as operating a drone outside of these guidelines may result in legal issues. The manufacturer takes no responsibility for operation of this product outside of what is legally permissible in your local area.

- Do not fly your Blitz drone any closer than 30 metres from people, animals, or buildings, and check to make sure you are no closer than 5.5 kilometres from any airfields or airports.

For more information on CASA's Australian legislation visit:

**<http://www.casa.gov.au/>** For information outside Australia please visit the website of your local aviation authority.

- Do not attempt to modify the Blitz drone or any of its components in any way, doing so will void your warranty and may affect the operation of the drone.
- Do not use the Blitz drone in any conditions that could affect, damage or impair your view of the Blitz drone including rain, wind, snow, fog or low light.
- Avoid getting your Blitz drone wet, dusty or sandy. These elements will damage the components of your Blitz drone.
- Please pay attention to the indication of low battery to avoid damage to your Blitz drone, or your surroundings.
- Please do not attempt to touch the Blitz drone when the Remote Control is powered on or if the rotor blades are turning.
- When flying your Blitz drone, please keep in mind the privacy of others.
- Do not power off the remote control without first disarming the motors. Failing to complete this will cause the Blitz to go into lost signal mode which will cause the rotor blades to spin.

## **IMPORTANT INFORMATION - PLEASE READ BEFORE USE**

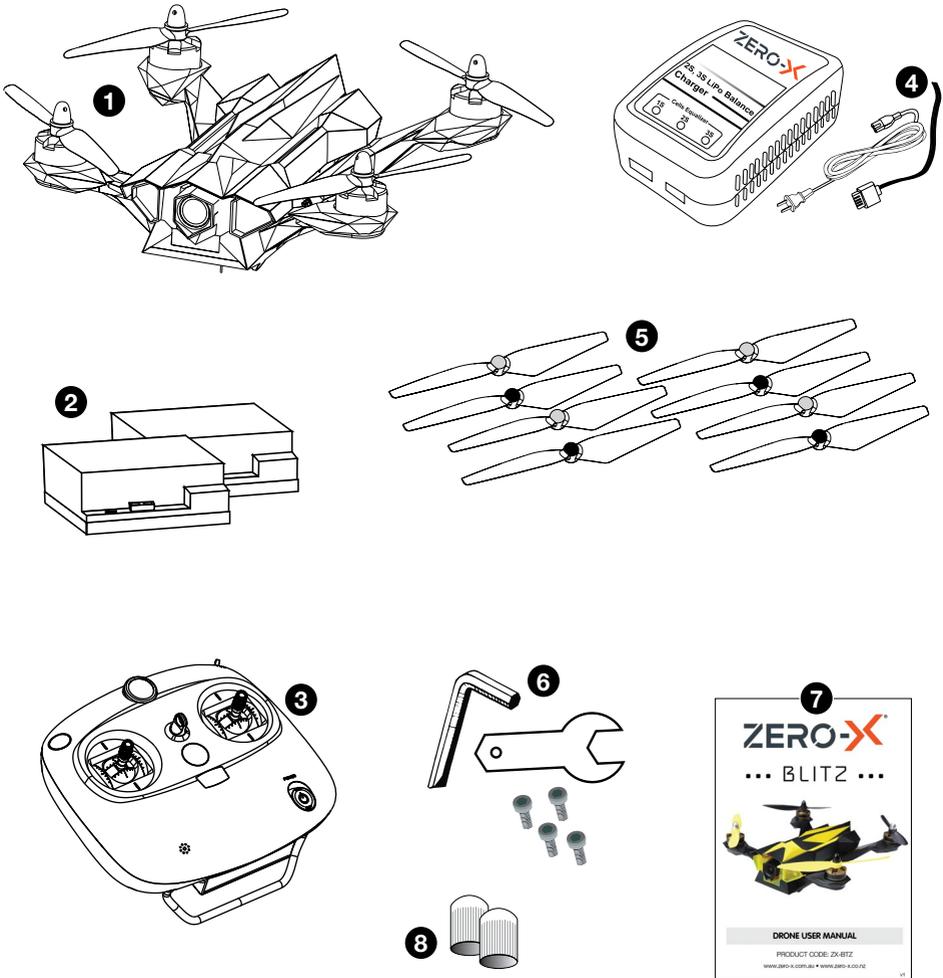
### **BATTERY SAFETY**

When handled incorrectly, Lithium polymer batteries can be dangerous and can potentially harm and do damage to persons or property. Zero-X does not accept any liability of damage to persons or property if the battery is not correctly charged, stored or protected.

- Always unwind all cables before charging.
- Do not over charge the battery. Once the charging process is completed, remove the battery from the charger as soon as possible.
- Only use the included or replacement Zero-X Blitz compatible chargers and batteries.
- You must charge the Lithium polymer battery in a safe area away from flammable materials.
- The battery is only to be charged under adult supervision, do not leave charging batteries unattended. You should always remain in constant observation to monitor the charging process and react immediately to any potential problems that may occur.
- Do not charge the battery in temperatures hotter than 40°C or colder than 0°C.
- Do not cover the batteries when charging. Do not leave batteries in direct sunlight.
- After each flight & or crash, please check battery for any damage or swelling.
- If the battery is damaged, leaking, making noise, punctured or malformed in any way DO NOT attempt to use it. Please dispose of the battery immediately and safely in the correct manner.
- Do not bend, puncture, crush or scratch the drone's battery. Do not store batteries in your pockets, on your person or in extreme temperatures.
- After flying/discharging the battery you must allow it to cool to ambient/room temperature before recharging.
- If at any time during the charge or discharge process the battery begins to balloon or swell, discontinue charging or discharging immediately. Quickly and safely disconnect the battery, then place it in a safe, open area away from flammable materials to observe it for at least 15 minutes. Continuing to charge or discharge a battery that has begun to balloon or swell can result in a fire. A battery that has ballooned or swollen even a small amount must be removed from service completely.
- Never plug in a battery and leave it to charge unattended overnight.
- Non-compliance with the above warnings may result in the failure of the battery.

## 2. INTRODUCTION

### 2.1 PACKAGE CONTENTS

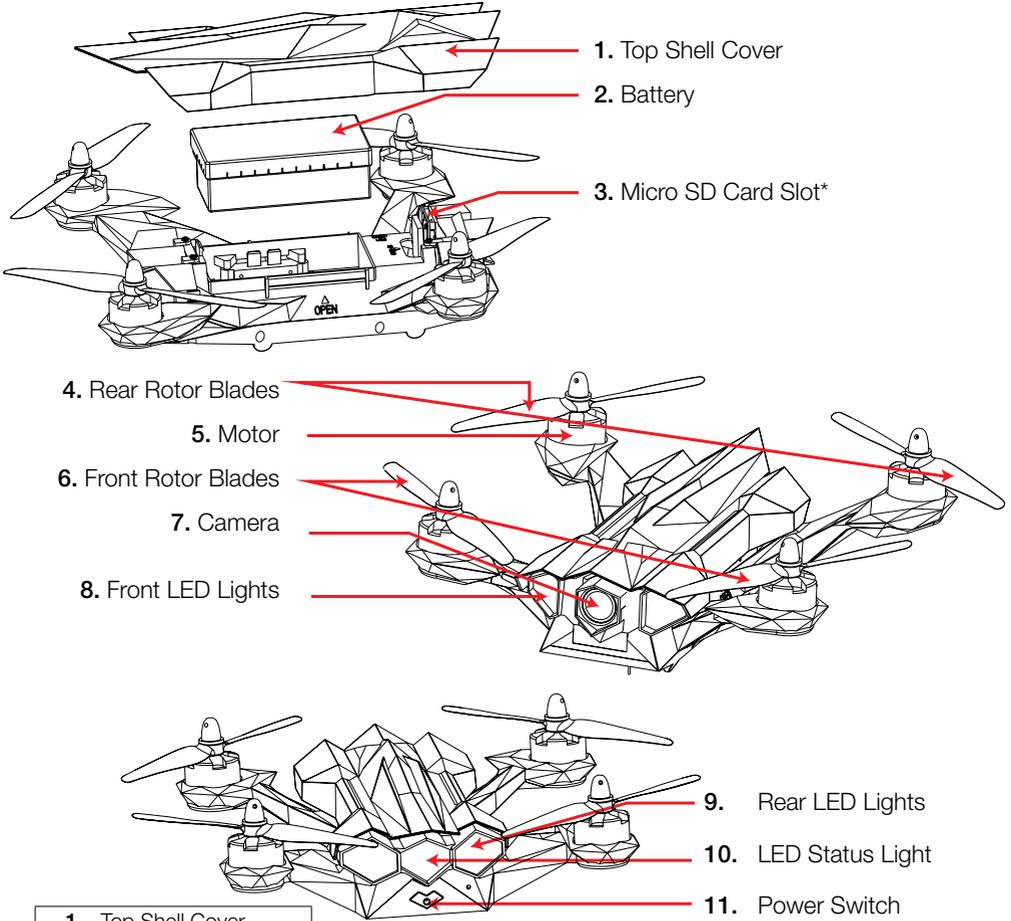


\*Fig 2.1.1

1.	1 X Blitz Drone
2.	2 X Drone Batteries
3.	1 X Remote Control
4.	1 X Balance Charger with cables
5.	8 X Rotor Blades
6.	Maintenance Kit
7.	User Manual
8.	2 x Thumbstick covers

## 2.2 PRODUCT OVERVIEW

### BLITZ DRONE

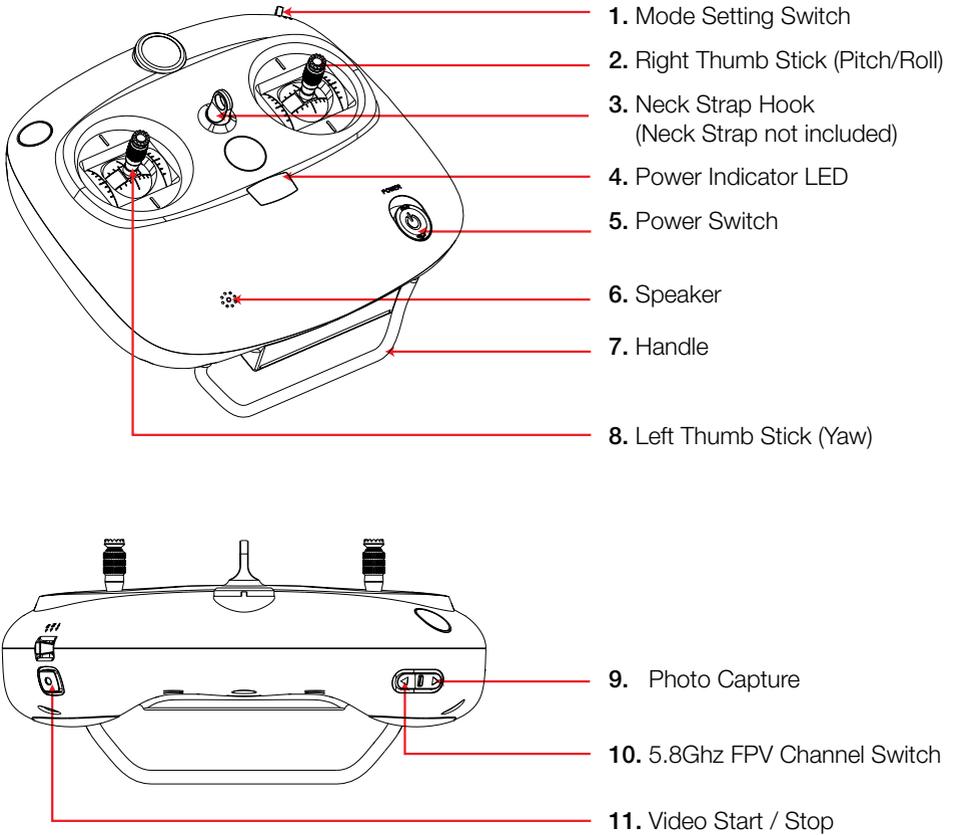


1. Top Shell Cover
2. Battery
3. Micro SD Card Slot
4. Rear Rotor Blades
4. Motor
6. Front Rotor Blades
7. Camera
8. Front LED Lights
9. Rear LED Lights
10. LED Status Light
11. Power Switch

\*Fig 2.2.1

\* Micro SD Card not included

## REMOTE CONTROL



\*Fig 2.2.2

1. Mode Setting Switch
2. Right Thumb Stick (Pitch/Roll)
3. Neck Strap Hook (Neck Strap not included)
4. Power Indicator LED
5. Power Switch
6. Speaker
7. Handle
8. Left Thumb Stick (Yaw)
9. Photo Capture
10. 5.8Ghz FPV Channel Switch
11. Video Start/Stop

**Please note:** 5.8Ghz FPV switch is to be used to tune a FPV display or headset. (FPV display and headset not included).

### 3. SETTING UP YOUR BLITZ DRONE

#### 3.1 CHARGING THE BATTERY

Fully unwind the Charging Cable and the Power cord and connect the Charging Cable to the 4 pin connection on the Lithium polymer Balance Charger (left port). Connect the power cord to the balance charger and then plug into a power socket. Only use the power cord, Charging Cable, Lithium polymer Balance Charger and Battery provided with the Blitz drone. When the Lithium polymer is correctly connected to power and ready to charge the three LEDs on the balance charger will slowly flash green and red. Once the charger is correctly set up connect the Blitz Battery to the charging cable via the port labelled "Charger". When the Blitz Battery is charging the three LEDs on the Lithium polymer Balance Charger will glow red. During the charging process do not disconnect the battery until it has finished charging to avoid damaging the battery.

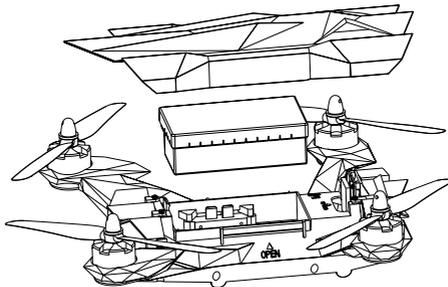
Once the battery is fully charged the three LEDs on the balance charger will glow green.

Once the battery is charged be sure to disconnect the battery from the charger to avoid overcharging or damaging the battery. When you have finished flying your Blitz drone please allow 30 minutes after use for the Battery to cool to room temperature before attempting to recharge.

- When connecting the Power Cord and Charging Cable, please be sure that the connections are secure and at the correct orientation.
- Never leave charging batteries unattended.
- Always charge batteries on a level, clear, non-flammable surface.
- Never cover the battery or Lithium polymer Balance Charger while charging is in progress.
- Do not leave batteries charging over night

#### 3.2 INSTALLING THE BATTERY

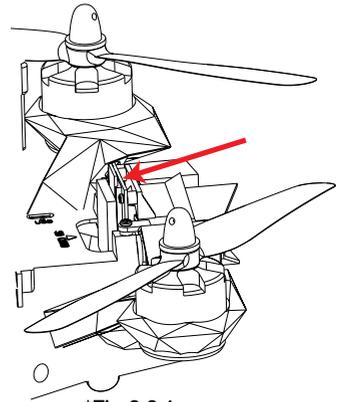
- Make sure the power switch on the drone is in the OFF position.
- Remove the top shell cover of the Blitz drone by lifting the top shell of from the section marked "Open".
- Insert the battery into the battery space ensuring that the power connector lines up.
- Replace the top shell cover ensuring that it is securely clipped in position.



\*Fig 3.2.1

### 3.3 INSTALLING A MICRO SD CARD

- Remove the top shell cover of the Blitz drone by lifting the top shell cover off from the section marked “Open”.
- Insert the Micro SD Card (Micro SD Card not included) into the Micro SD card slot with the text facing the back of the drone. (Refer to Fig 3.3.1)
- Push the Micro SD card down until a click is heard and the card locks into place.
- Replace the top shell cover ensuring that it is securely clipped into position.



\*Fig 3.3.1

\* Micro SD Card not included

### 3.4 REMOTE CONTROL

- Ensure that the Remote Control power switch is in the OFF (down) position. (Refer to Fig 2.2.2 on page 8 - number 5)
- Remove the battery cover.
- Insert 4 x AA batteries (AA Batteries Blitz not included) making sure that they are in the orientation specified.
- Do not mix new and old batteries or different types of batteries.

## 4. FLIGHT SAFETY

Before flying your Blitz drone make sure that you are in a safe setting.

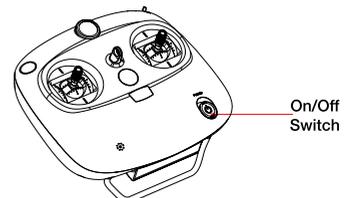
CASA restrictions regarding flying drones require the drone be no closer than 5.5kms from any airport or airfield whilst flying. Drones should also not be flown over populated areas or any closer than 30 metres from vehicles people or animals.

It is also required that you check your surroundings before taking off making sure there are no obstacles or dangers in the area, including overhead power lines and bodies of water. If there are hazards present in your intended area of flight, please consider an alternative location.

Be sure that you do not turn the controller off before disarming the motors of the Blitz drone. The Blitz drone is equipped with a lost signal protection system that keeps the rotor blades spinning when the signal to the drone is lost to avoid a hard crash. Switching off the controller will activate the lost signal protection and cause the rotor blades to spin.

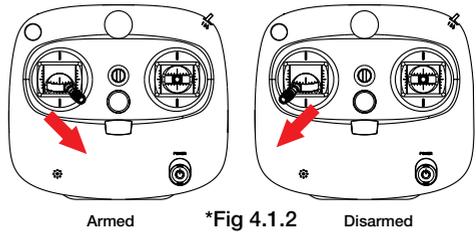
### 4.1 FLYING YOUR BLITZ DRONE

1. After installing a fully charged battery and installing 4 x AA batteries (AA batteries not included) into the remote control and conducting a complete check of your surroundings, turn the Power Switch (5) on the Blitz remote to the ON position. (Refer to Fig 2.2.2 on page 8 - number 5)



\*Fig 4.1.1

2. Once on, the LED lights on the arms of the Blitz drone should flash signalling no connection to the Remote Control. Place the Blitz drone on flat ground facing away from you and move back three metres.
3. With the left thumbstick in the lowest position, slide the left thumbstick to the bottom right position and hold for 3 seconds until the LED indicator on the rear of the Blitz drone flashes red and yellow quickly. This indicates that the motors are now armed and the Blitz is ready to fly.



4. Once you have finished flying the Blitz drone, land the drone and hold the left thumbstick in the bottom left position for 3 seconds until the indicator LED on the rear of the drone flash red and yellow slowly. The motors should now be disarmed, test this by slightly moving up the lift thumbstick and make sure the rotors don't spin before switching off the controller or approaching the drone.

**DO NOT APPROACH THE BLITZ UNTIL YOU HAVE DISARMED THE MOTORS AND SWITCHED THE CONTROLLER OFF.**

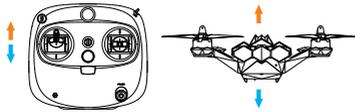
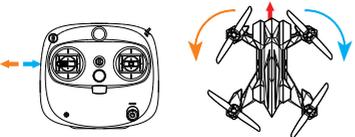
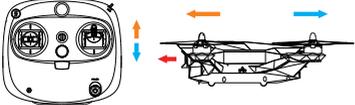
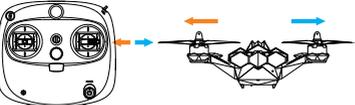
If for any reason the Blitz drone does not work after following the launching steps, please check the following:

- a) The Blitz drone battery is fully charged, correctly connected and not damaged.
- b) The batteries in the Remote Control are the same brand, have an equal amount of charge and have enough charge to power the remote control correctly (Using an assortment of batteries will affect the performance of the Remote Control).
- c) The connection between the Remote Control and the Blitz drone may not have been completed correctly. Ensure that when arming the motors, you move the left thumbstick into the lowest right position and hold for three seconds until the LED indicator on the rear of the drone flashes quickly.

Once these elements have been checked turn both the Blitz drone and the Remote Control off and start the launching process again.

## 4.2 CONTROLLING YOUR BLITZ DRONE

### BASIC CONTROLS

<b>Lift / Descent</b>	
	<p>Push up the Throttle Rudder Stick and the drone will fly up. Push down the Throttle Rudder Stick and the drone will fly down.</p>
<b>Yaw Left / Right</b>	
	<p>Push the Left Rudder Stick to the left or to the right, the drone will rotate in the corresponding direction.</p>
<b>Roll Left / Right</b>	
	<p>Push the Right Stick to the left or to the right, the drone will fly in the corresponding direction.</p>
<b>Pitch Forward / Back</b>	
	<p>Push the Right Stick forward or backward, the drone will fly in the corresponding direction.</p>

\*Fig 4.2.1

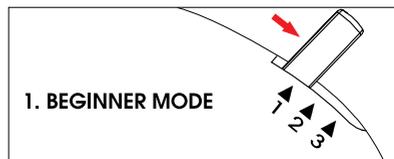
### 4.3 SPEED MODES

The Blitz drone has 2 speed modes that control the acceleration and manoeuvrability of the drone.

To change your selected speed setting, use the Mode Setting Switch in the top right hand side of the controller. (Refer to Fig 2.2.2 on page 8 - number 1). The Blitz drone also has a Stunt setting that disables the built in accelerometer allowing you to flop and roll your Blitz drone.

#### LOW SPEED MODE:

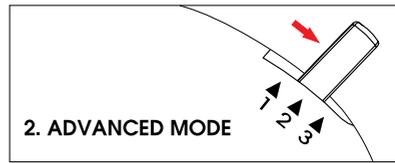
When you power up the Blitz drone it is suggested that you always start in low speed mode. To select low speed mode, switch the Mode Setting Switch (1) to the top position marked beginner mode. In this mode the Blitz drone will control and fly slowly. It is advised that beginners use this mode to learn the basics before moving onto the higher mode. (Refer to Fig 2.2.2 on page 8 - number 1)



\*Fig 4.3.1

### HIGH SPEED MODE:

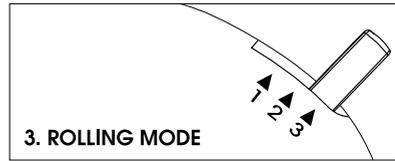
To activate high speed mode switch the Mode Setting Switch to the middle position marked advanced mode. (Refer to Fig 2.2.2 on page 8 - number 1). In this mode the sensitivity of both the acceleration, and directional control of the Blitz drone will be increased, making the Blitz drone more nimble and quick. It is advised that this mode is only used in a very open space once the pilot has gained significant drone flight experience. (Refer to Fig 2.2.2 page 8)



\*Fig 4.3.2

### STUNT MODE (ROLLING MODE):

To activate stunt mode, turn the switch in the top right of the controller to the lowest setting labelled rolling mode. (Refer to Fig 2.2.2 on page 8 - number 1) In this mode the accelerometer that keeps the drone balanced will switch off allowing you to be able to flip the drone using the Right Thumbstick.



\*Fig 4.3.3

Because this is a tactile flip and the accelerometer will be deactivated during the flip it is advised that the user has significant drone experience.

It is advised that rolls are performed quickly and that you allow 10M in all directions of the drone to avoid crashing or damaging your drone. (Refer to Fig 2.2.2 on page 8 - number 1)

## 4.4 USING YOUR CAMERA

The camera on the Blitz drone is controlled via the Video button on the top right of the controller. (Refer to Fig 2.2.2 on page 8 - button 10)

When you are intending to use the camera, please ensure that you have inserted a Micro SD Card (Micro SD Card not included) into the Micro SD card slot in the Blitz drone.

If the Blitz does not record, try re-inserting the SD Micro Card and restarting the Blitz drone.

### SHOOTING VIDEO:

To start recording video, push the Video Button on the remote control. To stop recording push the Video Button. Ensure you have stopped recording before removing the Micro SD Card, or turning the power off on your Blitz drone. (Refer to Fig 2.2.2 on page 8 - button 10)

## 5. MAINTENANCE

### 5.1 CLEANING:

Avoid exposing your Blitz drone and its accessories to dust, sand and moisture as these can damage the Blitz drone. If the Blitz drone is exposed to dust or sand, use a soft brush to remove any visible particles.

### 5.2 ROTOR BLADE INSTALLATION AND REPLACEMENT GUIDE:

To install or replace Rotor Blades on the Blitz please follow the Rotor Blade replacement instructions below.

1. There are two types of rotor blades that come with the Blitz drone, clockwise blades, and counter clockwise blades. You will need two of each blade to correctly set up the Blitz drone.

The blades are marked with the following codes on the top of the blades to differentiate between clockwise and counter clockwise.

#### **Clockwise 6045R | Counter 6045**

2. Pair each blade with an accompanying lock nut. Like the Rotor Blades there are two types of lock nut as the lock nut will be tightened by turning in the opposite direction that the blade spins.

The lock nut that is paired with the clockwise Rotor Blades (6045R) is black and will be tightened by turning counter clockwise.

The lock nut that is paired with the counter clockwise Rotor Blades (6045) is silver and will be tightened by turning clockwise.

3. Put the Rotor blades on the Blitz in the correct orientation, with the camera facing towards you, using the following guide:

**Front Left:** Counter Clockwise Rotor Blade (6045)

**Front Right:** Clockwise Rotor Blade (6045R)

**Rear Left:** Clockwise Rotor Blade (6045R)

**Rear Right:** Counter Clockwise Rotor Blade (6045)

Push the blades down onto the motor stalk as far as they will go.

4. Using the included rotor blade tool attach and tighten the lock nuts in the orientation below, with the camera facing towards you.

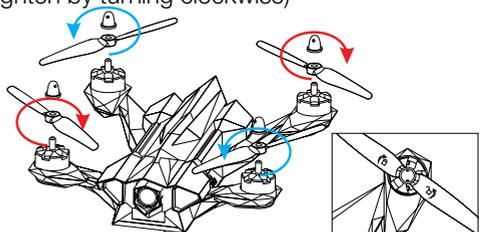
**Front Left:** Silver Nut (tighten by turning clockwise)

**Front Right:** Black Nut (tighten by turning counter clockwise)

**Rear Left:** Black Nut (tighten by turning counter clockwise)

**Rear Right:** Silver Nut (tighten by turning clockwise)

**Please note:** Installing the Rotor Blades incorrectly will prevent the Blitz from flying. Please ensure you have the Rotor Blades installed correctly before attempting to fly.



\*Fig 5.2.1 - Lock Nut Tightening Guide

## 6. SPECIFICATIONS

Dimensions	23cm x 22cm x 8.5cm	Frequency	2.4Ghz
Weight	450g	Camera Resolution	720P
Channels	6	Photo Resolution	1MP
Battery	1300mAh 3S Lithium polymer 11.1V	Video Format	AVI
Motors	4	Photo Format	JPG
Transmitter battery	4 AA Batteries (not included)	Memory	Micro SD Card Class 4 and above up to 32 GB (not included)

## 7. WARRANTY TERMS & CONDITIONS

Our goods come with guarantees that cannot be excluded under the Australian and New Zealand Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is provided in addition to your rights under the Australian & New Zealand Consumer Law.

Zero-X warrants that this product is free from defects in material and workmanship for a period of 12 months from the date of purchase or for the period stated on the packaging. This warranty is only valid where you have used the product in accordance with any recommendations or instructions provided by Zero-X.

This warranty excludes defects resulting from alterations of the product, accident, misuse, abuse or neglect.

In order to claim the warranty, you must return the product to the retailer from which it was purchased or if that retailer is part of a National network, a store within that chain, along with satisfactory proof of purchase. The retailer will then return the goods to Zero-X. Zero-X will repair, replace or refurbish the product at its discretion. The retailer will contact you when the product is ready for collection. All costs involved in claiming this warranty, including the cost of the retailer sending the product to Zero-X, will be borne by you.

### **Zero-X Address:**

33 Quinn Drive, Keilor Park  
Victoria 3042 Australia

**Ph:** +61 03 8331 4800

**Email:** [service@zero-x.com.au](mailto:service@zero-x.com.au)

**ZERO-X**

[www.zero-x.com.au](http://www.zero-x.com.au)  
[www.zero-x.co.nz](http://www.zero-x.co.nz)



© Zero-X v1.0 2016