

# hawk

Compact Drone with 3 Speed Modes  
**DRONE USER MANUAL**



**ZERO-X**

Capture the skies.™

ZX-HWK

v1.0



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## 1. WELCOME

Thanks for purchasing a Zero-X Hawk, get ready to have the time of your life! We're sure your Zero-X Hawk 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**

Connect the Hawk battery to the included USB charging cable and insert the USB charging cable into the supplied USB wall charger. While the battery is charging the LED on the charging cable will turn off. Once charging is complete the light will glow red. While the battery is charging please take the time to read the instructions and familiarise yourself with the controls of your Zero-X Hawk.

### **GENERAL SAFETY**

Please familiarise yourself with your local legislation regarding drone usage before you begin using your Zero-X Hawk.

Included in the package contents of your Zero-X Hawk 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. Zero-X takes no responsibility for operation of this product outside of what is legally permissible in your local area.

- Do not fly your Hawk any closer than 30 metres from people, animals or buildings. 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 Hawk 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 Hawk in any conditions that could affect, damage or impair your view of the Hawk including rain, wind, snow, fog or low light. Avoid getting your Hawk wet, dusty or sandy. These elements will damage the components of your Hawk.
- Please do not attempt to touch the Hawk when the Remote Control is powered on, or if the rotor blades are turning.
- When flying your Hawk, please keep in mind the privacy of others.

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

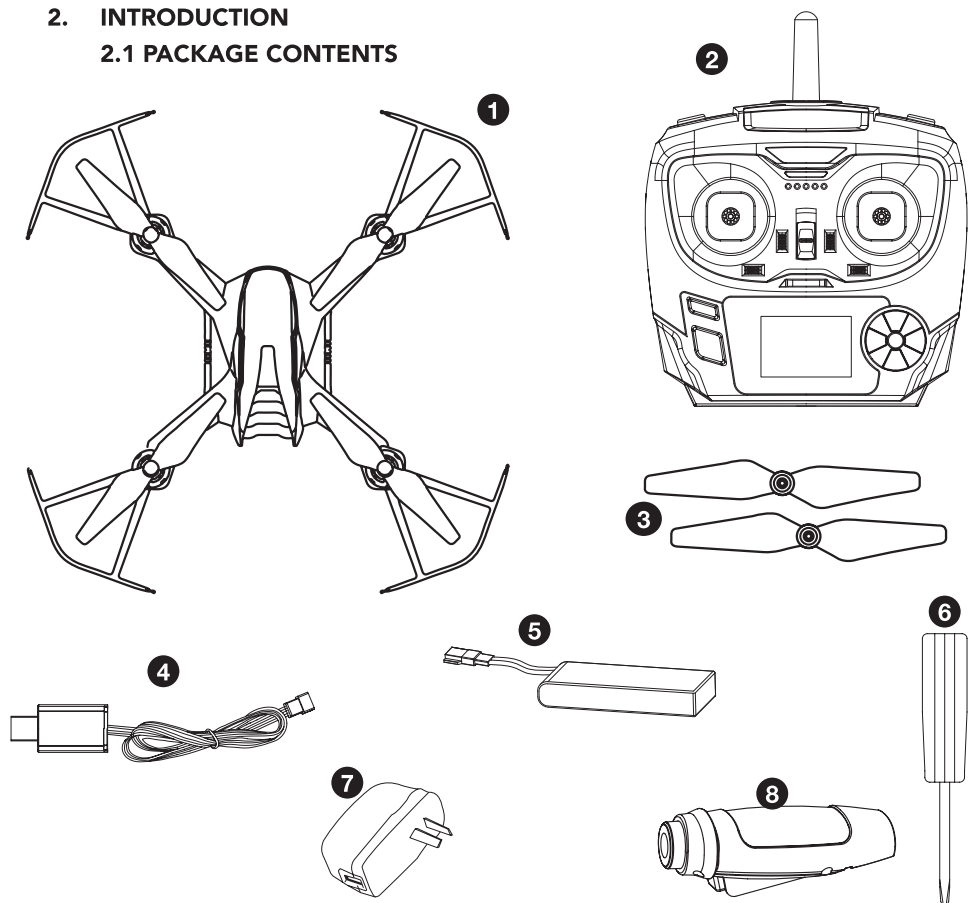
### **BATTERY SAFETY**

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 for damage to persons or property if the battery is not correctly charged, stored or protected.

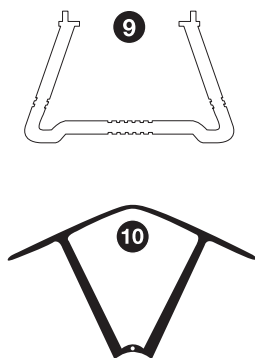
- Always unwind all cables before charging.
- Do not over charge the battery. Once the charging process is completed, remove the battery from the charger as soon as possible.
- Only use the included or replacement Zero-X Hawk chargers and batteries.
- You must charge the Lithium polymer battery in a 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



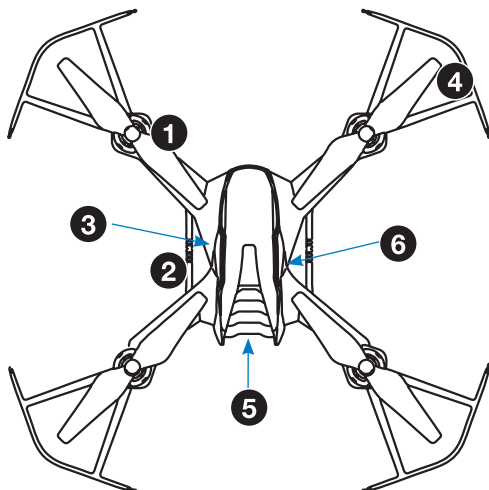
1.	Hawk
2.	Remote Control
3.	Rotor Blades
4.	USB Charging Cable
5.	Battery
6.	Screwdriver
7.	AC Wall Charger
8.	Camera
9.	Feet
10.	Rotor Guards
11.	User Guide



## 2.2 PRODUCT OVERVIEW

### HAWK DIAGRAM

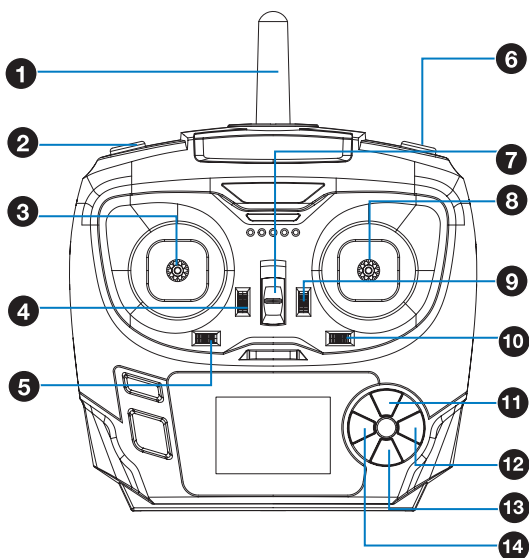
1.	Rotor blades
2.	Feet
3.	Power Switch
4.	Rotor Guards
5.	Battery Hatch/Flap
6.	Camera



\* Micro SD Card not included

### REMOTE CONTROL DIAGRAM

1.	Antenna
2.	Directional Lock
3.	Left Thumb Stick
4.	Throttle Trimming
5.	YawTrimming
6.	Flip Button
7.	Power Switch
8.	Right Thumb Stick
9.	Back / Forward Pitch Trimming
10.	Left/Right Roll Trimming
11.	Speed Mode Button
12.	Light On/Off
13.	Video Button
14.	Photo Button





### 3. SETTING UP YOUR ZERO-X HAWK

#### 3.1 CHARGING THE BATTERY

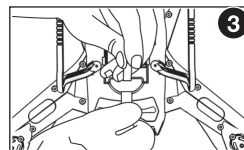
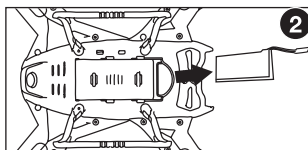
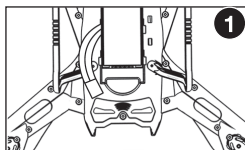
**PLEASE NOTE:** YOUR ZERO-X DRONE COMES WITH A CERTIFIED ZERO-X USB AC CHARGING ADAPTER FOR 240v CHARGING OF YOUR DRONE BATTERY. USE OF A NON ZERO-X CERTIFIED USB AC CHARGING ADAPTER WILL VOID YOUR WARRANTY AND MAY DAMAGE BOTH YOUR BATTERY AND DRONE.

Fully unwind the included USB charging cable and plug the USB end into the included Zero-X Certified USB AC charging adapter. When connected to a charging source the LED light in the charger will turn off. Connect the drone battery to the charging cable and the light will glow red indicating charging is in process. The LED on the USB charging cable will turn off again once charging is complete. To keep the battery life as long as possible avoid removing the battery from the charging cable before charging is complete. If you have just finished flying your Hawk drone, please allow the battery to cool down for at least 30 minutes before recharging.

- When the Hawk battery has finished charging it is advised that the battery is removed from the charger as soon as possible. Overcharging will damage the battery and effect the flight time.
- The Hawk battery can take up to 90 minutes to fully charge. If the battery has been on charge for any longer than 2 hours and the indicator on the charging cable is not showing that the battery is charged please remove the battery from the charger.
- When connecting the USB cable with the battery, make sure to follow the guides on the battery connector as these are designed to only be inserted in one direction. Forcing the connection in the incorrect direction, may cause damage to the battery and charging cable.

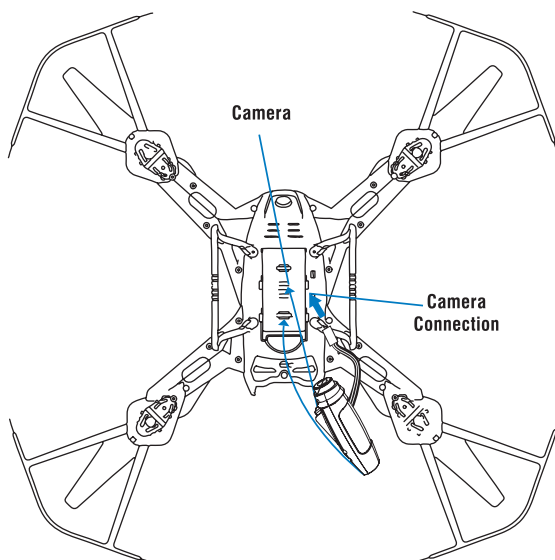
#### 3.2 INSTALLING THE BATTERY

1. Open the battery flap on the underside of the Hawk by sliding it toward the rear of the drone being careful of the attached camera.
2. Insert the battery into the tray.
3. Connect the battery to the power cable and close the battery flap making sure it is secure.



### 3.3 CAMERA CONNECTION GUIDE

1. Connect the camera connection wire to the socket on the under side of the Hawk. Be sure to connect the cable in the correct orientation, connecting the cable the wrong way can cause damage to the connection.



Avoid pulling or twisting the cable and ensure that the plug is in the correct orientation.

Twisting the cable or inserting the plug in the incorrect orientation may damage the camera connection on your Hawk.

2. Hook the connection pegs on the camera on to the loops on the battery flap on the Hawk drone and slide the camera forward until the camera clips into position.

### 3.4 INSTALLING A MICRO SD CARD

With the Hawk upside down and facing away from you insert the Micro SD card into the rear of the camera ensuring that the text side of the Micro SD Card is face down and the notched side of the card is on the left side.

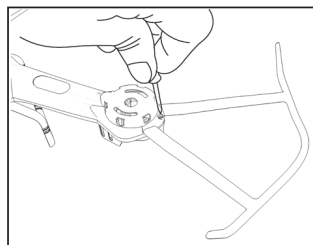
Gently press the card in until you hear the lock click into place.

*(\*Micro SD Card not included)*

### 3.5 INSTALLING/REMOVING ROTOR GUARDS

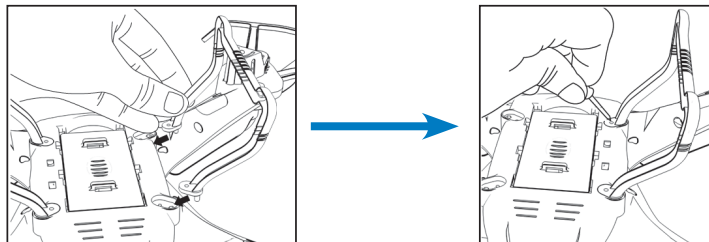
Rotor Guards are an optional fitting on the Hawk, however for safety reasons we strongly advise you to attach them. Whether Rotor Guards are attached or not, please be very careful when handling the drone. To avoid injury, do not touch the drone while the blades are turning or the remote control is powered on.

- Line up the guide pegs on the Rotor Guards with the holes on the arms of the Hawk so that the screw in the Rotor Guard matches up with the screw hole in the Hawk.



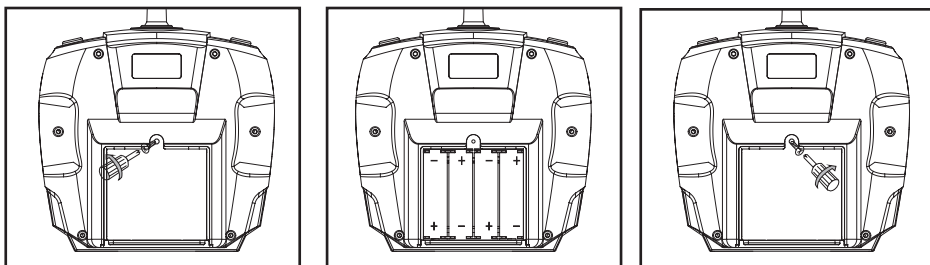
### 3.6 FEET INSTALLATION

Line up the guide pegs on the feet with the holes on the underside of the Hawk's body so that the screws in the feet match up with the screw holes on the underside of the Hawk.



### 3.7 REMOTE CONTROL

1. Ensure that the Remote Control power switch is in the OFF (down) position.
2. Open the battery cover by unscrewing the securing screw and sliding down the open tab.
3. Insert 4 x AA batteries (AA batteries not included) making sure that they are in the orientation specified.



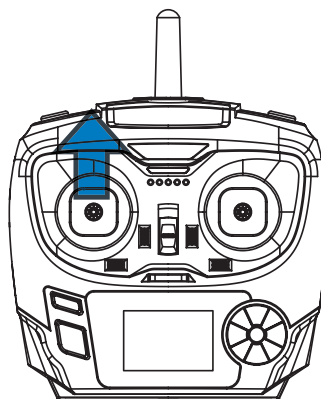
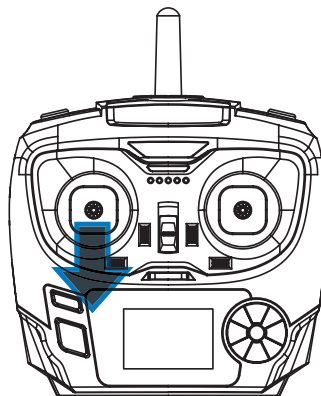
## 4. FLIGHT SAFETY

Before flying your Hawk make sure that you are in a safe setting. CASA restrictions regarding flying drones require the drone to 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.

## 4.1 FLYING YOUR HAWK

1. After installing a fully charged battery into the Hawk 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 on the Hawk to the ON position.
2. Once on, the LED lights on the arms of the Hawk should flash signalling a connection to the Remote Control. Place the Hawk on the ground facing away from you and move back three metres.
3. With the Left Thumbstick (Acceleration/Yaw) in the lowest (down) position power on the remote control. The remote should beep once to indicate power up has been successful.
4. To activate the connection between the remote and the Hawk, move the Left Thumbstick (Acceleration/Yaw) on the Remote Control to the highest (up) position. Hold for one second and then return the Left Thumbstick (Acceleration/Yaw) to the lowest (down) position.



## 4.2 TROUBLE SHOOTING

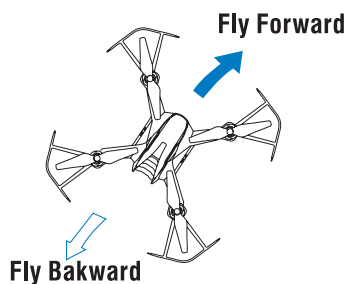
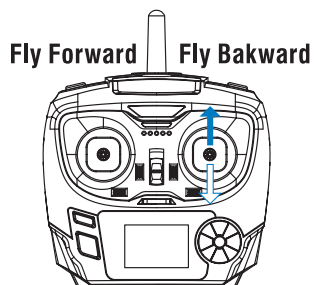
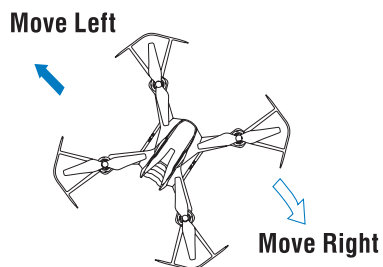
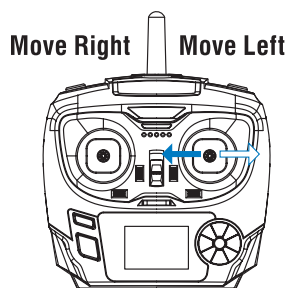
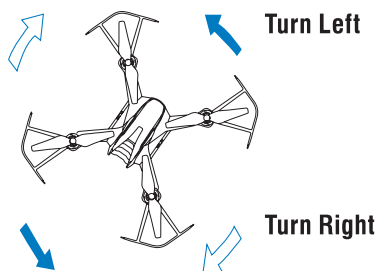
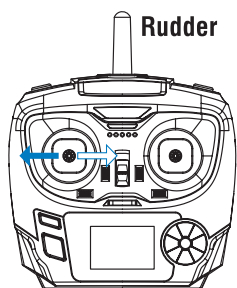
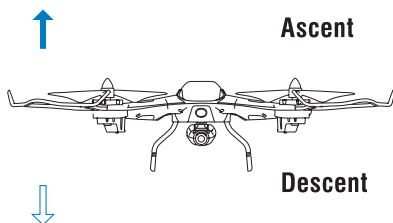
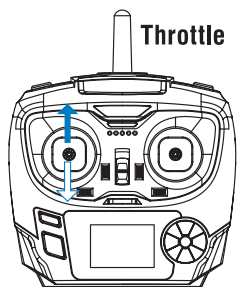
**Do not approach the drone again until the remote has been powered off. If for any reason the Hawk does not work after following the above steps please check the following.**

- a) The Hawk 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 Hawk drone may not have been completed correctly. Ensure that when activating the connection, the Left Thumbstick is moved all the way to the top and then all the way to the bottom. If this is not completed the connection will not activate.

**Once these elements have been checked, turn both the Hawk and the Remote Control off and start the launching process again.**

## 4.3 CONTROLLING YOUR HAWK

### BASIC CONTROLS



## 4.4 SPEED MODES

The Hawk has 3 speed modes that control the acceleration and manoeuvrability of the drone. To cycle through the Speed Modes, use the Speed Button marked with two arrows on the bottom right of the controller.

### LOW

When the Hawk is powered up it will start in LOW speed mode. In this mode, the Hawk will control and fly slowly. It is advised that beginners use this mode to learn the basics before moving onto the two higher modes.

### MID

Push the Speed Button once and the Remote Control will beep twice indicating that the Hawk is now in the medium Speed Mode. In this mode, the sensitivity of both the acceleration, and directional control of the Hawk will be increased, making the Hawk more nimble and quick.

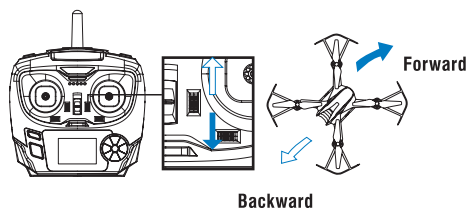
### HIGH

Push the Speed Button a second time and the Remote Control will beep three times indicating that the Hawk is now in its highest Speed Mode. In this mode, the sensitivity of both the acceleration and directional control will be increased again. It is advised that this mode is only used in a very open space once the pilot has gained significant drone flight experience.

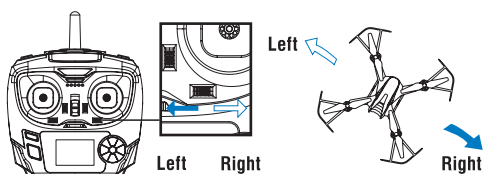
## 4.5 TRIMMING

Trimming is used to balance the Hawk when flight is off centred. Please check before attempting to use trimming that the Hawk's flight is not being affected by outside forces such as wind.

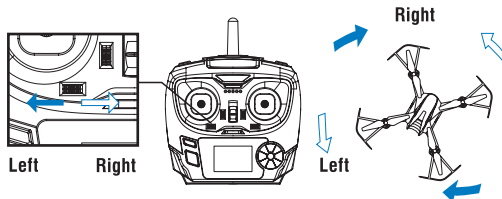
To trim the Hawk's pitch, use the Pitch Trim Controller which is the small switch on the Remote Control to the left of the Right Thumbstick. This will balance the forward and back movement of the Hawk.



To trim the Hawk's roll, use the Roll Trim Controller which is the small switch on the Remote Control below the Right Thumbstick. This will balance the left and right movement of the Hawk.



To trim the Hawk's yaw, use the Yaw Trim Controller which is the small switch on the Remote Control below the left Thumbstick. This will balance the left and right spin of the Hawk.



#### 4.6 FLIPPING AND STUNTS

The Hawk can perform 360 flips in any direction by pushing the Flip Button, and then pushing the Right Thumbstick (Pitch / Roll) in the direction you want to flip the drone. Please ensure that you have a 2 metre clearance below, and in all directions around the drone before attempting to flip as this manoeuvre requires considerable space.

#### 4.7 USING YOUR CAMERA

The camera on the Hawk is controlled via the Video and Photo buttons on the bottom right of the remote control. When you are intending to use the camera, please ensure that you have inserted a Micro SD card (not included) into the Micro SD card slot in the Hawk.

The light on the camera will shine solid blue when a Micro SD Card is detected, and it is ready to record video or take still photos. If the light on the camera does not activate or flashes red, try re-inserting the Micro SD Card and restarting the Hawk.

#### 4.8 SHOOTING VIDEO

To start recording video, push the Video Button on the remote control. The light on the camera will shine red indicating that recording is in progress. To stop recording push the Video Button again and the light on the camera will return to shining blue. Ensure you have stopped recording before removing the Micro SD Card, or turning the power off on your Hawk.

#### 4.9 SHOOTING PHOTOS

To take a photo with your Hawk press the Photo Button on the remote control. The light on the camera will flash red once and then return to blue.

#### 4.10 USING YOUR DIRECTIONAL LOCK

Directional Lock mode is a mode that makes it easy for beginners to fly. In this mode the direction you and the Hawk are facing when the Hawk is launched will always be forward on the controls, no matter which way the Hawk is facing. This means that even if you can't see which way the Hawk is facing you will be able to bring the drone back towards yourself by pulling back on the Right Thumbstick (Pitch/Roll).

#### **4.11 TO ACTIVATE DIRECTIONAL LOCK**

1. After powering up the Hawk and pairing with the controller (see section 'Flying your Hawk') ensure that you and the Hawk are facing the same direction.
2. Press the Directional Lock Button on the top left of the Remote and the lights on the Hawk will flash indicating that the drone is now in Directional Lock mode. It is important that you do not change the orientation position you are standing in when you activate Directional Lock as this will affect the control of the drone.
3. You will now be able to fly the Hawk in Directional Lock mode.
4. To exit Directional Lock mode, push the Directional Lock again and the Hawk lights will shine solid again.

### **5. MAINTENANCE**

#### **5.1 CLEANING:**

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

#### **ROTOR BLADE REPLACEMENT:**

1. Use the included screwdriver to remove the screw on the top of the Rotor Blade.
2. Gently remove the Rotor Blade.
3. Ensure that you are replacing the Rotor Blade with the correct blade as there are two different orientations of blades which are labeled A and B on the underside of the blade.

#### **IF THE INCORRECT BLADE IS USED IN THE INCORRECT PLACEMENT THE HAWK WILL NOT WORK.**

Different colour Rotor Blades are used front and back on your Hawk so it is easy to identify the front and rear of the Hawk when flying. To ensure that it is easy to fly the Hawk make sure that the front and rear blades are different colours.

4. Gently push the replacement Rotor Blade into place. Replace the screw being careful not to over tighten. If the screw will not fit in place, remove the screw and make sure that the holes on both the Rotor Blade and the rod are aligned.



## 6. PARTS AND ACCESSORIES

We understand that it's not always easy learning how to fly a drone, and sometimes a close call can turn into a crash landing. To thank you for your support of Zero-X and your drone purchase, we would like to help you build your confidence in learning how to fly your drone. We would like to offer you 50% off your first two orders of any spare parts, by using the codes in the coupons below.

There you will be able to find and buy the spare parts listed below.

- Battery
- Counter Clockwise Motor
- Rotor guards
- Clockwise Motor
- Rotor blades
- Feet



Visit [www.zero-x.com.au](http://www.zero-x.com.au) to make your purchase.

## 7. SPECIFICATIONS

Dimensions	27.5cm x 27.5cm x 9cm
Weight	250g
Resolution	720P
Channels	4
Battery	550mAh
Motors	4
Transmitter Battery	4 x AA Batteries (not included)
Frequency	2.4GHz
Memory	Micro SD Card Class 6 and above, up to 32GB (not included)

## 8. 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)



# \_hawk

Capture the skies.™

**ZERO-X**

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CE FC      
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