ZERO-X

SPECTRE DRONE

USER MANUAL

PRODUCT CODE: ZXSPT

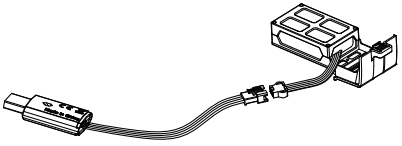
www.zero-x.com.au
www.zero-x.co.nz

v2

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



Connect the Spectre drone 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 glow red. Once charging is complete the light will glow green. While the battery is charging take the time to read the instructions and familiarise yourself with the controls of your Zero-X Spectre drone.

General Safety

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

Included in the package contents of your Zero-X Spectre drone are the Australian CASA guidelines, please carefully read 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 Spectre 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.

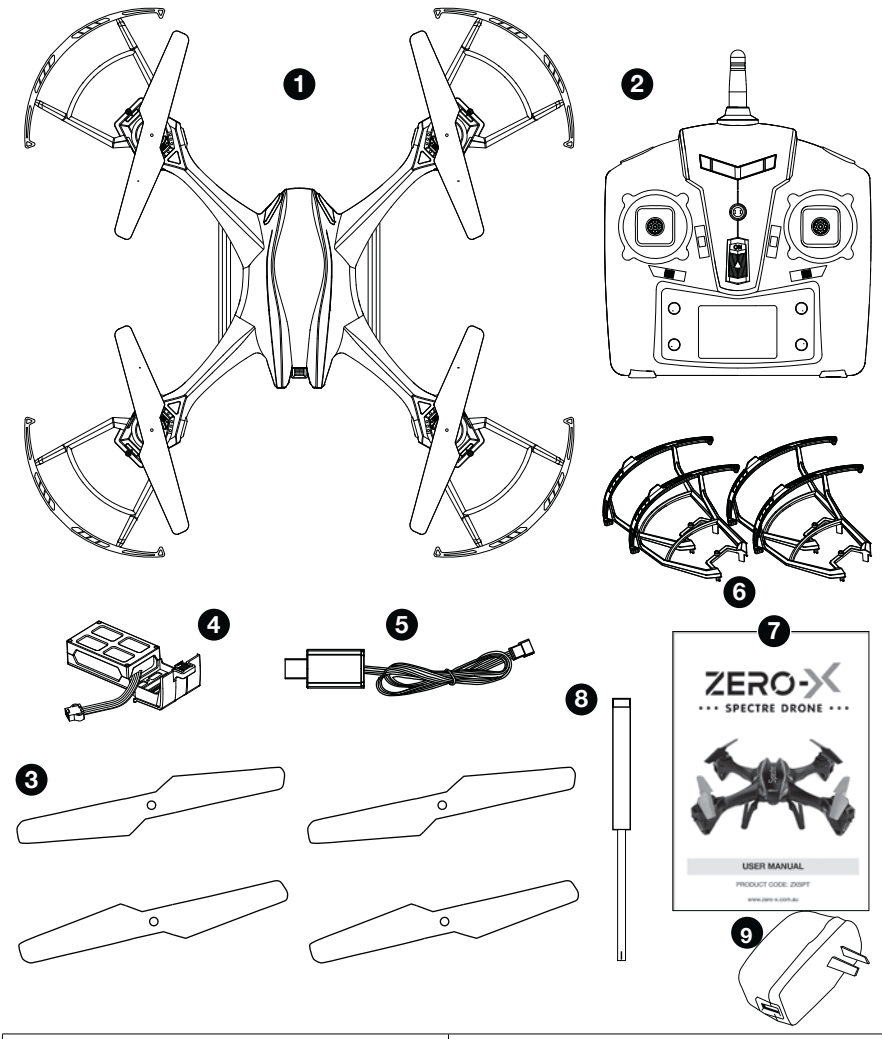
  For more information on CASA's Australian legislation visit: http://www.casa.gov.au/ For information outside Australia please visit the website of your local aviation authority.
- Do not attempt to modify the Spectre drone or any of its components in any way, doing so will void your warranty and may affect the operation of the drone.
- Do not use the Spectre drone in any conditions that could affect, damage, or impair your view of the Spectre drone including rain, wind, snow, fog or low light.
- Avoid getting your Spectre drone wet, dusty, or sandy. These elements will damage the components of your Spectre drone.
- Please pay attention to the indication of low battery to avoid damage to your Spectre drone, or your surroundings.
- Please do not attempt to touch the Spectre drone when the Remote Control is powered on, or if the rotor blades are turning.
- When flying your Spectre drone, please keep in mind the privacy of others.

Battery Safety

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

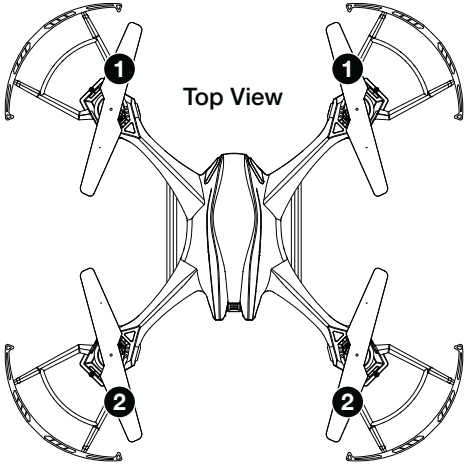
- Always unwind all cables before charging.
- Do not over charge the battery. Once the charging process is completed, remove the battery from the charger as soon as possible.
- Only use the included, or replacement Zero-X Spectre compatible chargers and batteries.
- You must charge the LiPo battery in 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.
- After each flight & or crash, please check battery for any damage or swelling.
- Do not cover the batteries when charging. Do not leave batteries in direct sunlight.
- 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.

Package Contents

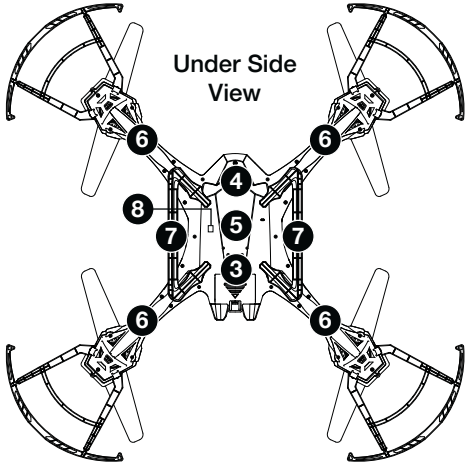


1. Spectre Drone	2. Remote Control
3. Spare Rotor Blades	4. Drone Battery
5. Drone Charger	6. Rotor Guards
7. Manual	8. Screwdriver
9. USB Wall Charger	

Spectre Drone Diagram



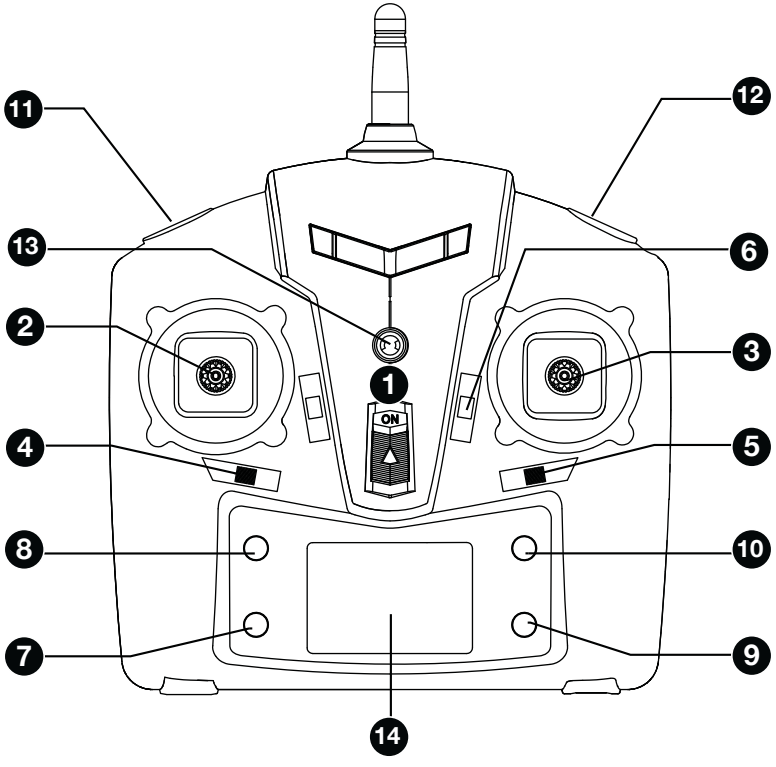
1. Front Rotor Blades	2. Rear Rotor Blades



3. Battery	4. Camera
5. Micro SD Card Slot*	6. LED Lights
7. Feet	8. Power Switch

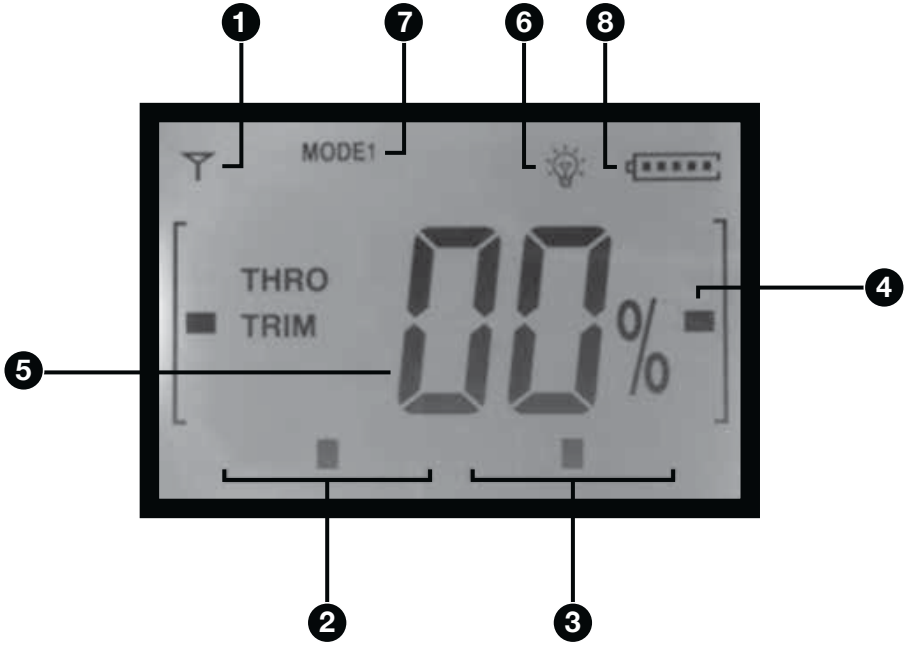
* Micro SD Card not included

Remote Control Diagram



1. Power Switch	2. Left Thumbstick (Acceleration / Yaw)
3. Right Thumbstick (Pitch / Roll)	4. Yaw Trim Controller
5. Roll Trim Controller	6. Pitch Trim Controller
7. Video Button	8. Photo Button
9. Speed Button	10. Flip Button
11. Stunt Mode	12. LED Lights Control
13. Power Indicator	14. LCD Screen

Remote Control LCD Screen Diagram



1. Connection Strength	2. Yaw Trim Balance
3. Roll Trim Balance	4. Pitch Trim Balance
5. Acceleration	6. Light Indicator
7. Speed Mode	8. Battery

Set Up

Charging the Battery

Fully unwind the included USB charging cable and plug the USB end into the included USB wall charger. Only use the USB charging cable and wall charger included with the Spectre drone. If you are unable to use the suppled wall charger, please ensure that the charger that you use is C Tick certified and has an output minimum of DC 5V/1A and maximum of DC 5V/2.1A. Chargers above or below this range can potentially damage the battery and charger. When connected to a charging source the LED light in the charger will glow green. Connect the drone battery to the charger and the light will glow red indicating charging is in process. The LED on the USB charging cable will begin to glow green 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 Spectre drone, please allow the battery to cool down for at least 30 minutes before recharging.

- If the battery is being charged by computer, make sure to pull out the USB cable if you want to shut down the computer.
- When connecting the USB cable with the battery, make sure to follow the correct polar indicator.
- When flying the Spectre drone, low battery will be indicated when the remote control starts beeping and the lights on the Spectre drone start flashing.

Installing the Battery

- Ensure that the Spectre drone's power switch (8) is in the OFF position.
- Connect the battery cable to the Spectre drone's power cable ensure that the plug is inserted in the correct orientation.
- Tuck the cable into the battery opening.
- Insert the fully charged battery with the charging wires facing outwards.
- Close the battery hatch making sure the battery drawer clicks into place.

Camera

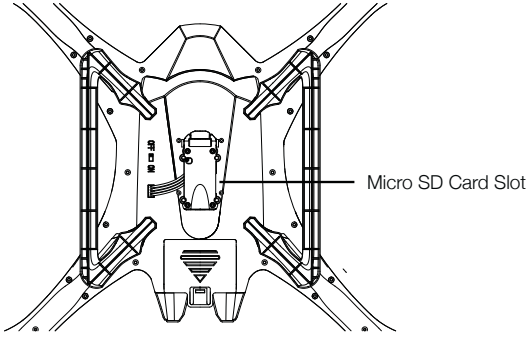
The camera on the Spectre drone should already be connected. It is advised that this camera is not removed and reconnected as this can potentially damage the camera connection.

If it is necessary to plug these cables in make sure that the plugs are facing the correct way as plugging these in incorrectly could permanently damage the connection pins on the Spectre drone.

Set Up

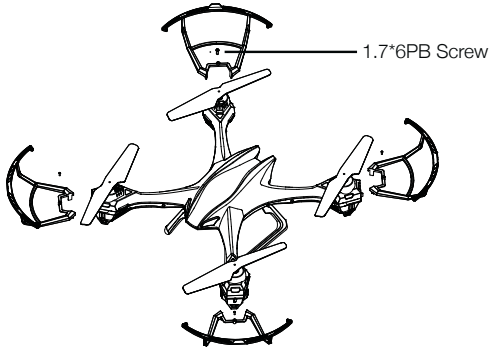
Installing a Micro SD Card

- With the Spectre drone upside down and facing away from you, insert the Micro SD Card (Micro SD Card not included) into the side of the camera ensuring that the text side of the Micro SD Card is facing up.
- Gently press the card in until you hear the lock click into place.



Rotor Guards

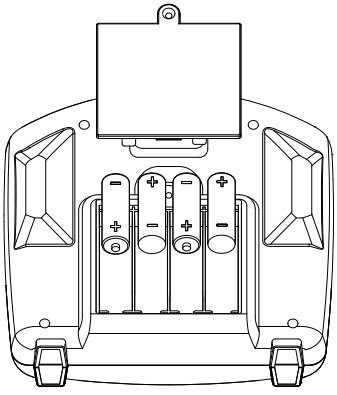
- Rotor Guards are an optional fitting on the Spectre drone, however for safety reasons we strongly advise you to attach them. Whether Rotor Guards are attached or not, please be very careful when handling the drone. To avoid injury, do not touch the drone while the blades are turning or the remote control is powered on.
- Line up the guide pegs on the Rotor Guards with the holes on the arms of the Spectre drone so that the screw in the Rotor Guard matches up with the screw hole in the Spectre drone.
- Firmly press the Rotor guard into position inserting one peg at a time.
- Insert the included screws into the screw holes and use the included screwdriver tighten the screws making sure not to over tighten.



Set Up

Remote Control

- Ensure that the Remote Control power switch (1) is in the OFF (down) position.
- With the included screwdriver unscrew the battery cover on the rear of the Remote Control.
- Remove the battery cover.
- Insert 4 x AA batteries (AA Batteries not included) making sure that they are in the orientation specified.
- Do not mix new and old batteries or different types of batteries.



Flight Safety

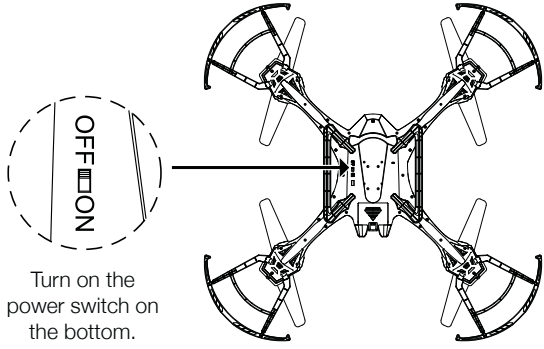
Before flying your Spectre drone make sure that you are in a safe setting.

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.

Launching your Spectre 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 (8) on the Spectre drone to the ON position.

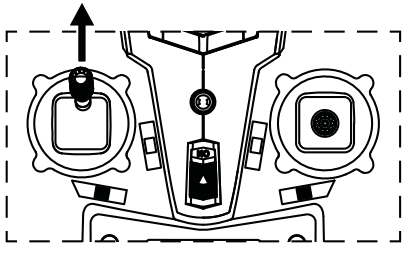


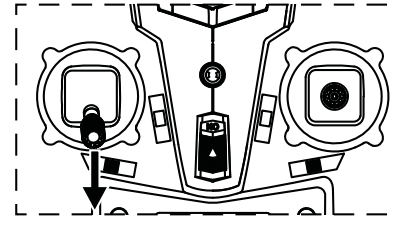
Turn on the power switch on the bottom.

2. Once on, the LED lights on the arms of the Spectre drone should flash signalling no connection to the Remote Control. Place the Spectre drone on flat ground facing away from you and move back three metres.

3. With the Left Thumbstick (Acceleration/Yaw) (2) in the lowest (down) position, power on the remote control. The remote control should beep once to indicate power up has been successful.

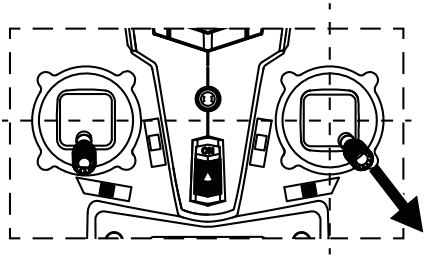
4. To activate the connection between the remote control and the Spectre drone, move the Left Thumbstick (Acceleration/Yaw) (2) on the Remote Control to the highest (up) position hold for one second and then return the Left Thumbstick (Acceleration/Yaw) (2) to the lowest (down) position holding for another 2 seconds. The remote should beep three times, the lights on the arms of the Spectre drone should shine solid and the power indicator light on the Remote Control will shine solid indicating that the connection has been successful.





Launching your Spectre drone

5. Calibrate the Spectre drone by holding the Right Thumbstick (Pitch/Roll) (3) in the bottom right position. This ensures that the Spectre drone stays level and flies straight. The Lights on the Spectre drone will flash fast while calibrating. Keep holding the Thumbstick in the bottom right position until calibration is complete.



If the Spectre drone starts to fly abnormally, it may need to be recalibrated. To recalibrate the Spectre drone turn the Remote Control and Spectre drone off, and then restart the Launching Your Spectre Drone process.

Do not approach the drone again until the remote has been powered off

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

a) The Spectre 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).

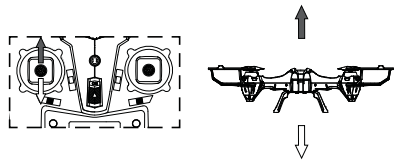
c) The connection between the Remote Control and the Spectre drone may not have been completed correctly. Ensure that when activating the connection, the Left Thumbstick (Acceleration/Yaw) (2) is moved all the way to the top and then all the way to the bottom. If this is not completed the connection will not activate..

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

Controlling your Spectre Drone

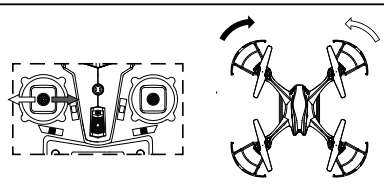
Basic Controls

Lift / Descent



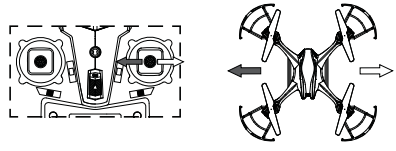
Push up the Throttle Rudder Stick and the drone will fly up. Push down the Throttle Rudder Stick and the drone will fly down.

Yaw Left / Right



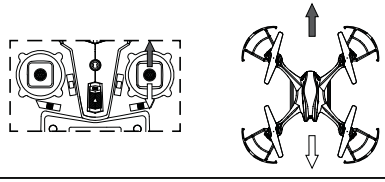
Push the Left Rudder Stick to the left or to the right, the drone will rotate in the corresponding direction.

Roll Left / Right



Push the Right Stick to the left or to the right, the drone will fly in the corresponding direction.

Pitch Forward / Back



Push the Right Stick forward or backward, the drone will fly in the corresponding direction.

Controlling your Spectre Drone

Speed Modes

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

To cycle through the Speed Modes, use the Speed Button (9) to the right of the LCD screen on the Remote Controller.

LOW SPEED MODE:

When the Spectre drone is powered up it will start in LOW SPEED MODE.

In this mode the Spectre drone will control and fly slowly. It is advised that beginners use this mode to learn the basics before moving onto the higher mode.

HIGH SPEED MODE:

Push the Speed Button (9) once and the Remote Control will beep once and the LCD screen will show MODE 2 indicating that the Spectre drone is now in HIGH SPEED MODE.

In this mode the sensitivity of both the acceleration, and directional control of the Spectre drone will be increased, making the Spectre 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.

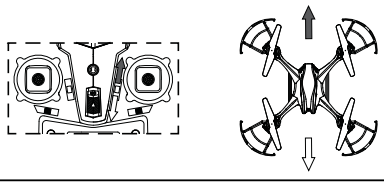
Controlling your Spectre Drone

Trimming

Trimming is used to balance the Spectre drone when the flight is off centred.

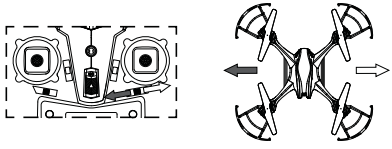
Please check before attempting to use trimming that the Spectre drone's flight is not being affected by outside forces such as wind.

Trimming Pitch



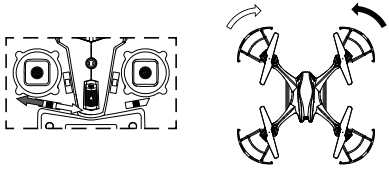
To trim the Spectre drones' pitch, use the Pitch Trim Controller which is the small switch on the Remote Control to the left of the Right Thumbstick. This will balance the forward and back movement of the Spectre drone.

Trimming Roll



To trim the Spectre drones' 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 Spectre drone.

Trimming Yaw



To trim the Spectre drones' 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 Spectre drone.

Controlling your Spectre Drone

Flipping and Stunt Mode

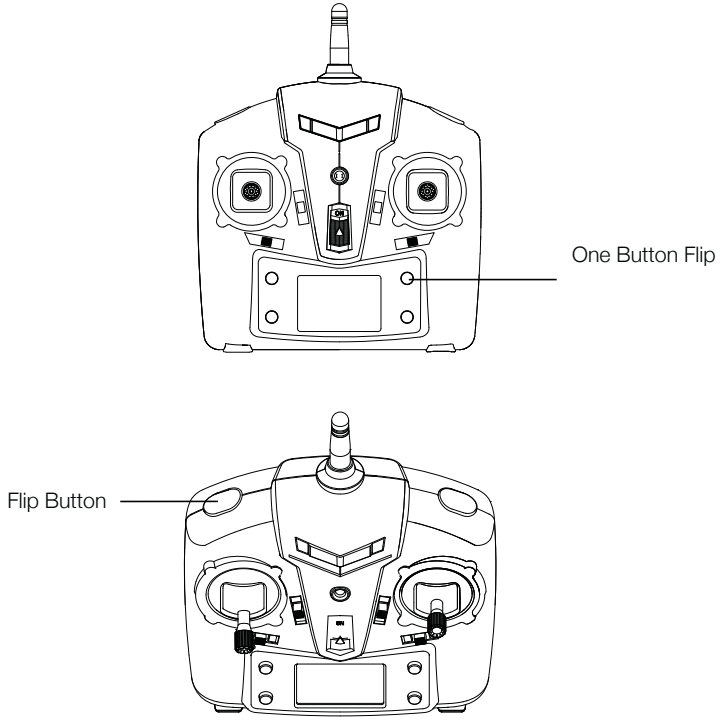
The Spectre drone is capable of performing 360° flips. This is possible by using either the Flip button or activating Stunt Mode.

To Perform a forward flip push the Flip Button (10), marked “FUNC” to the right of the LCD screen on the Remote Control. This will launch the Spectre drone forward into a forward flip.

The Stunt Mode can be used to flip the Spectre drone in any direction by pressing the Stunt Mode button (11) and holding the Right thumbstick (Pitch/Yaw) (3) in the desired flip direction.

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 a lot of space.

Flips will be deactivated when the Spectre drone has low power, and will be reactivated once the battery is charged.



Controlling your Spectre Drone

Camera

The camera on the Spectre drone is controlled via the Video (7) and Photo (8) buttons on the remote control to the left of the LCD screen.

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 Spectre drone.

The light on the camera will shine green 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, try re-inserting the SD Micro Card and restarting the Spectre drone.

Shooting Video:

To start recording video, push the Video Button (7) on the remote control. The Light on the camera will start flashing red indicating that recording is in progress. To stop recording push the Video Button (7) again and the light on the camera will return to shining green. Ensure you have stopped recording before removing the Micro SD Card, or turning the power off on your Spectre drone.

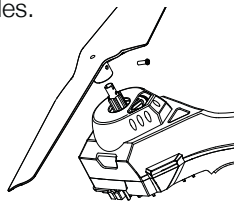
Shooting Photos:

To take a photo with your Spectre drone press the Photo Button (8) on the remote control. The light on the camera will flash red once and then return to green.

Maintenance

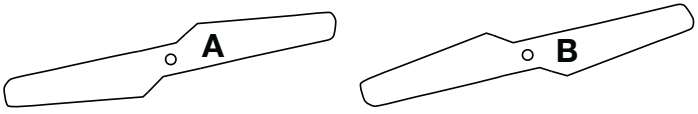
Cleaning:

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

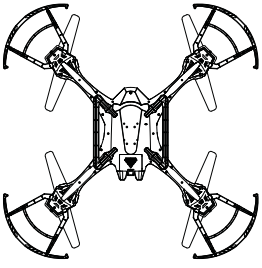


Rotor Blade replacement:

1. Use the Included screwdriver to remove the screw on the base 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 labelled A and B.

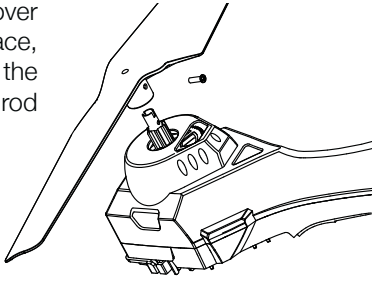


If the incorrect blade is used in the incorrect placement the Spectre drone WILL NOT WORK. Different colour Rotor Blades are used so it is easy to dentify the front and rear of the Spectre drone when flying. To ensure that it is easy to fly the Spectre drone make sure that the front and rear blades are different colours.



4. Gently push the replacement Rotor Blade onto the rod ensuring that the screw hole on the Rotor hole lines up with the hole on the rod.

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



Parts and Accessories

To purchase parts and accessories for your Zero-X Spectre drone, please visit your nearest Zero-X retailer or visit us online at www.zero-x.com.au or www.zero-x.co.nz

ZXRBSRBW Rotor Blades for Spectre and Rapture drones – Black and White

ZXRBSRBO Rotor Blades for Spectre and Rapture drones – Black and Orange

ZXRBSRBR Rotor Blades for Spectre and Rapture drones – Black and Red

ZXRBSRVP Rotor Blades for Spectre and Rapture drones Value Pack

ZXBATSR1K 1000mAh Battery for Spectre and Rapture drones

ZXCHSRDR Battery charger for Spectre and Rapture drones

Specifications

Dimensions	48cm x 48cm x12cm
Weight	320g
Channels	4
Battery	1000mAh
Motors	4
Transmitter battery	4 AA Batteries (not included)
Screen	LCD
Battery	5V, 1A, USB

Frequency	2.4Ghz
Camera Resolution	720P
Photo Resolution	2MP
Video Format	AVI
Photo Format	JPG
Memory	Micro SD Card Class 4 and above up to 32 GB (not included)

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

ZERO-X

www.zero-x.com.au
www.zero-x.co.nz

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