

titan

Extended Range Drone with Advanced Flight Systems

DRONE USER MANUAL



ZERO-X[®]

Capture the skies.™

PRODUCT CODE: ZX-TTN

v1

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1. WELCOME

Thanks for purchasing a Zero-X Titan, get ready to have the time of your life! We're sure your Zero-X Titan 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 Titan 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 please take the time to read the instructions and familiarise yourself with the controls of your Zero-X Titan.

GENERAL SAFETY

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

Included in the package contents of your Zero-X Titan 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 Titan 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 Titan 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 Titan in any conditions that could affect, damage or impair your view of the Titan including rain, wind, snow, fog or low light. Avoid getting your Titan wet, dusty or sandy. These elements will damage the components of your Titan.
- Please do not attempt to touch the Titan when the Remote Control is powered on, or if the rotor blades are turning.
- When flying your Titan, please keep in mind the privacy of others.

IMPORTANT INFORMATION - PLEASE READ BEFORE USE

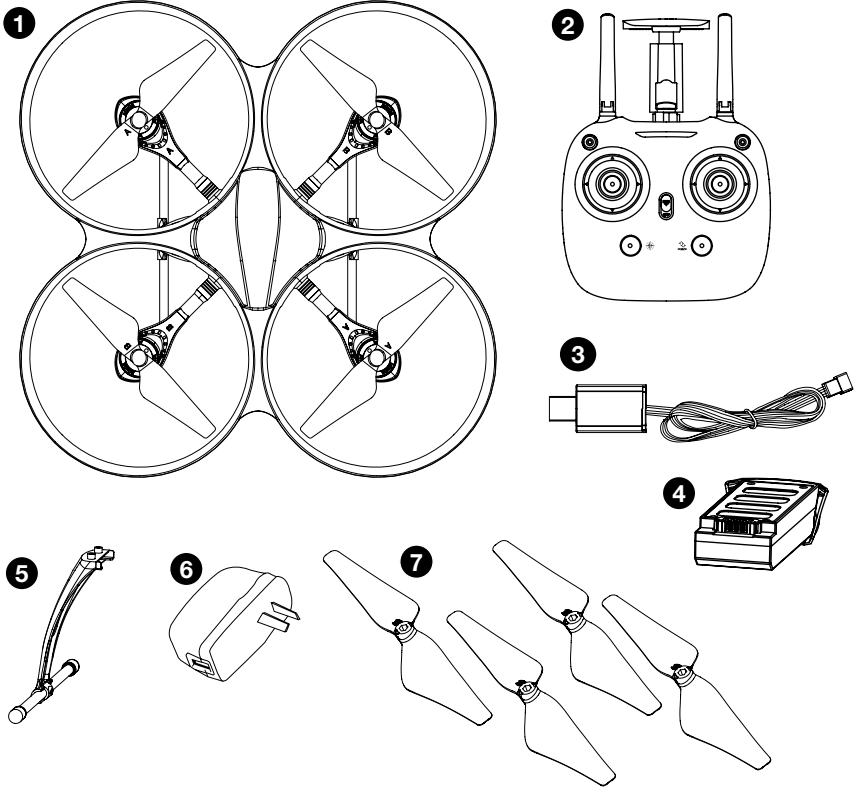
BATTERY SAFETY

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.

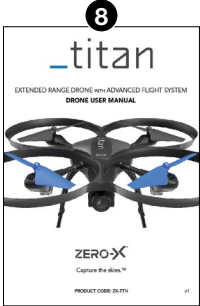
- Always unwind all cables before charging.
- Do not over charge the battery. Once the charging process is completed, remove the battery from the charger as soon as possible.
- Only use the included or replacement Zero-X Titan chargers and batteries.
- You must charge the Lithium polymer battery in a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

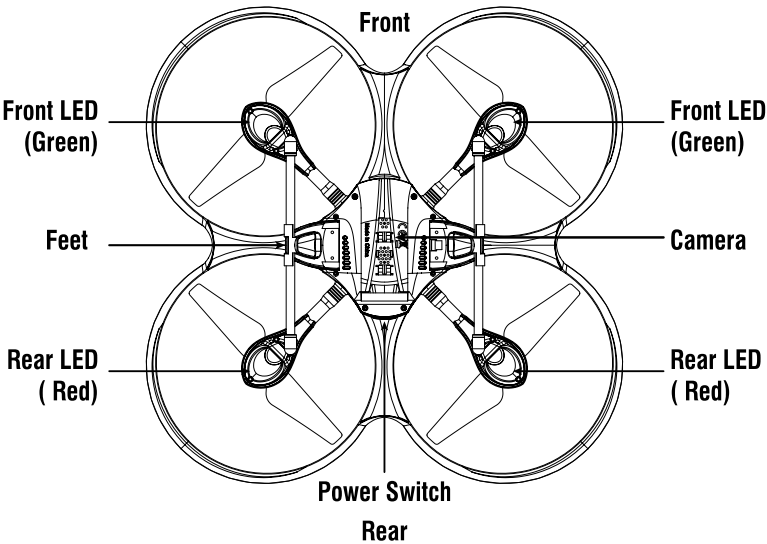
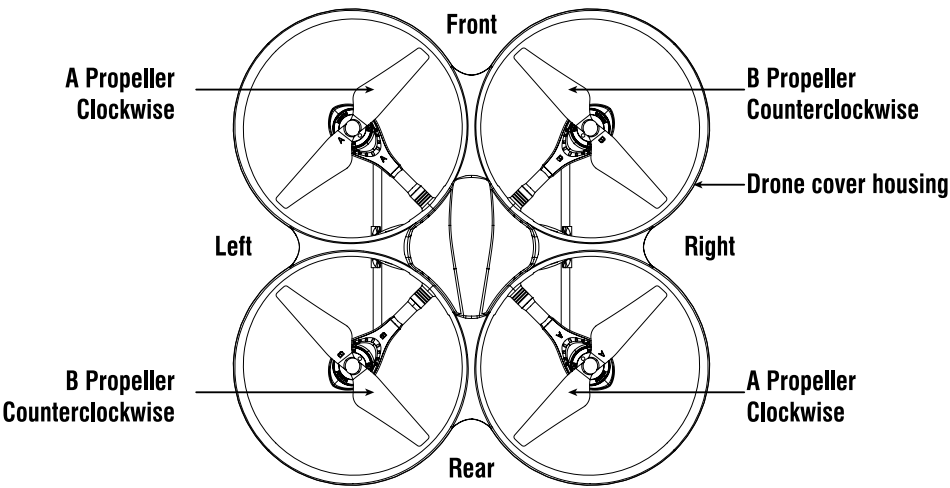
2.1 PACKAGE CONTENTS



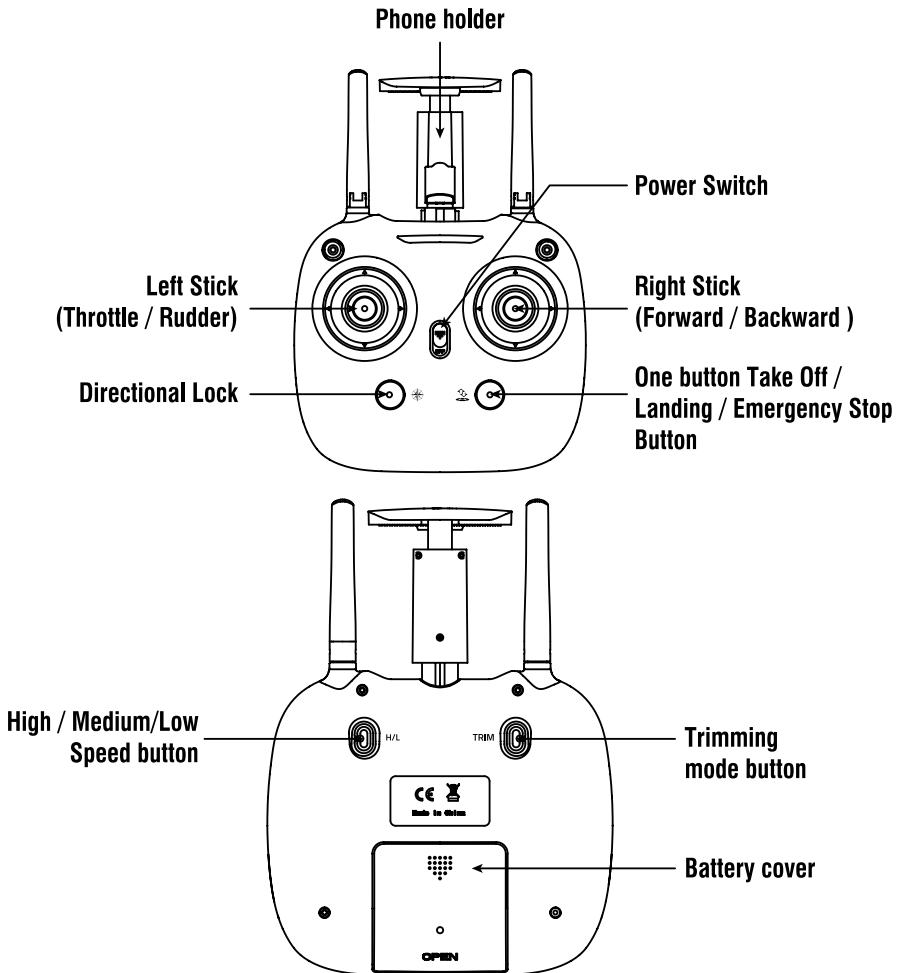
1.	Titan Drone
2.	Remote Control
3.	USB Charger
4.	Battery
5.	Drone Feet
6.	AC wall charger
7.	Rotor Blades
8.	User Guide
9.	Screwdriver



2.2 PRODUCT OVERVIEW
TITAN DIAGRAM



REMOTE CONTROL DIAGRAM



3. SETTING UP YOUR ZERO-X TITAN

3.1.0 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.

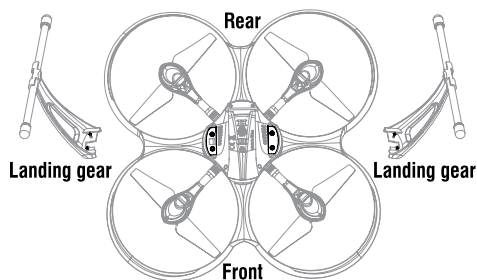
When connected to a charging source the LED light in the charger will glow green. Connect the drone battery to the charging cable and the light will turn red indicating charging is in process.

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 Titan drone, please allow the battery to cool down for at least 30 minutes before recharging.

- When the Titan 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 Titan 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.
- When flying the Titan, low battery will be indicated when the remote control starts beeping and the lights on the Titan start flashing.

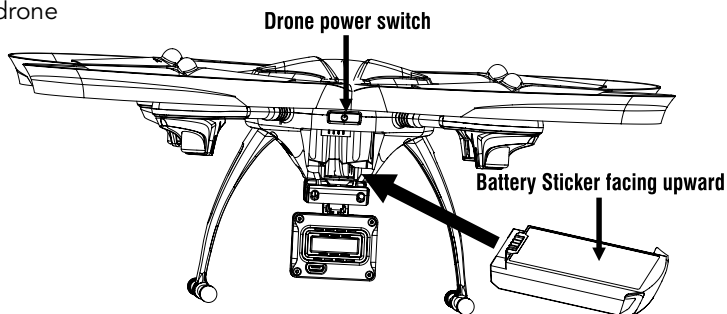
3.1.1 INSTALLING THE FEET

Place the feet on the underside of the Titan in the position shown below. With the feet in position use the included screws to secure the feet in position.



3.1.2 INSTALLING THE TITAN BATTERY

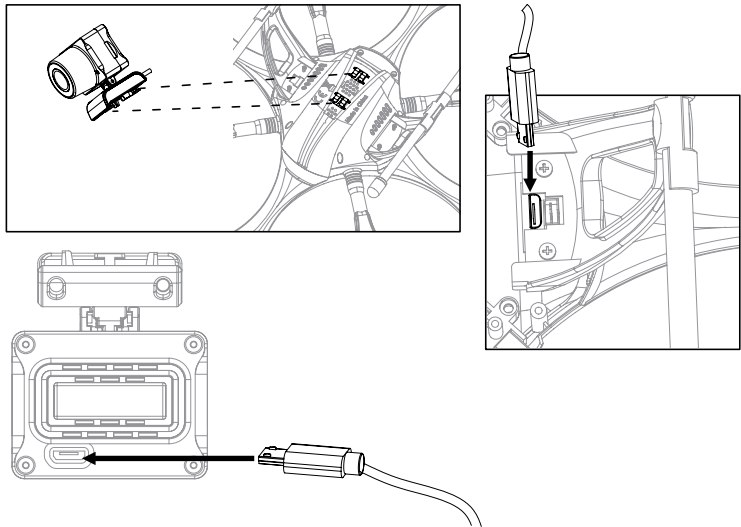
1. Slide the fully charged battery into the battery slot on the rear of the Titan Drone with the battery sticker facing upward.
2. Make sure the battery clicks into place and is secure.
3. Hold the power button for two seconds to power up the Titan drone



3.1.3 CAMERA

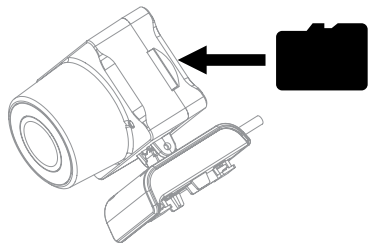
The camera for the Titan will need to be connected. Once installed, it is advised that this camera is not removed and reconnected as this can potentially damage the camera connection.

1. To attach the camera align the notches on the top of the camera with the slots on the under side of the Titan drone and slide the camera back into position ensuring that the camera is secure.
2. To connect the Micro USB connection, connect one end of the supplied cable to the camera while supporting the camera with your other hand. Then Connect the other end of the micro USB cable to the Titan drone.



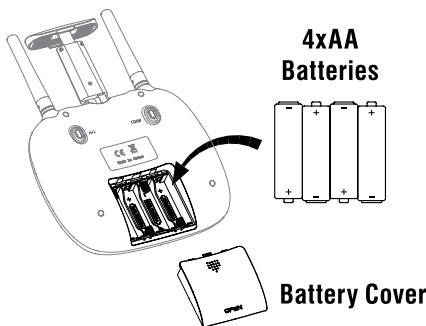
3.1.4 INSTALLING A MICRO SD CARD

1. With the Titan 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 also facing away from you.
2. While supporting the camera, gently press the card in until you hear the lock click into place.



3.1.5 REMOTE CONTROL

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



3.1.6 FLIGHT SAFETY

Before flying your Titan 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.

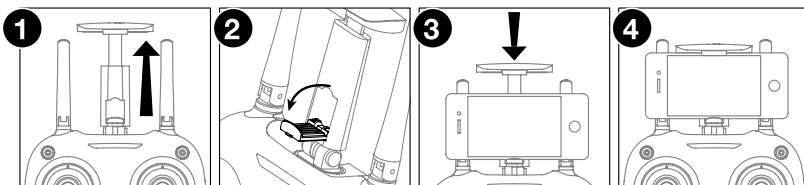
3.1.7 WIFI CONNECTION AND APP SET UP

To use your Apple or Android smart-phone as a FPV screen you will need to wirelessly connect your smartphone to your Titan over WiFi. This is done during the set up and launching of the Titan and requires you to have the Zero-X Titan App installed.

1. To find the Zero-X Titan App search 'Zero-X Titan' on the Apple App store if you are using an iPhone, or on the Google Play store if you are using an Android phone.
2. Download the Zero-X Titan App.
3. Once the App is downloaded and installed on your Smartphone, switch on your Titan by holding the power button for two seconds and move your Smart-phone to be within two metres of the drone.
4. When the Titan is switched on (without the remote controller switched on) The lights on the arms of the Titan will flash. While these lights are flashing the WiFi signal will start up be available for connection.
5. In your Smart-phone's WiFi settings find the and select the ZX TITAN WiFi connection.
6. Open the Zero-X Titan App.
7. Press the App Control button on screen to access FPV mode

3.1.8 USING THE REMOTE CONTROL SMART PHONE HOLDER

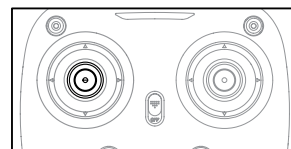
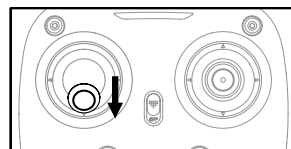
1. Extend the Phone cradle from the top of the drone
2. Flip down the bottom grip of the phone cradle
3. Lift the top grip and place your smart phone horizontally between the two grips.
4. Release the top grip making sure that your smart phone is securely in position.



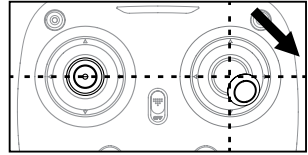
4. FLYING YOUR TITAN

GETTING STARTED, POWERING UP, PAIRING, CALIBRATING AND UNLOCKING THE MOTORS

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, hold the power button on the Titan for two seconds.
2. Once on, the LED lights on the arms of the Titan should flash signalling no connection to the Remote Control.
3. On your Android or Apple Smart-phone, open your WiFi settings and connect to the ZX Titan WiFi connection. Once connection is made, open the Zero-X Titan app on your Smart-phone.
4. Position your phone in the remotes smart phone holder.
5. Switch the remote controls power switch to the up On position. The remote control should beep once to indicate power up has been successful.
6. To activate the connection between the remote control and the Titan, move the Left Thumbstick (Acceleration/Yaw) on the Remote Control to the lowest (down) position hold for one second and then return the Left Thumbstick to the middle resting position. The remote should beep three times, the lights on the arms of the Titan should shine solid and the power indicator light on the Remote Control will shine solid indicating that the connection has been successful.



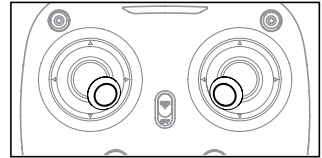
7. Calibrate the Titan by holding the Right Thumbstick (Pitch/Roll) in the bottom right position. This ensures that the Titan stays level and flies straight. The Lights on the Titan will flash fast while calibrating. Keep holding the Thumbstick in the bottom right position until calibration is complete.



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

When calibrating the Titan, please ensure that the Titan is on a level surface.

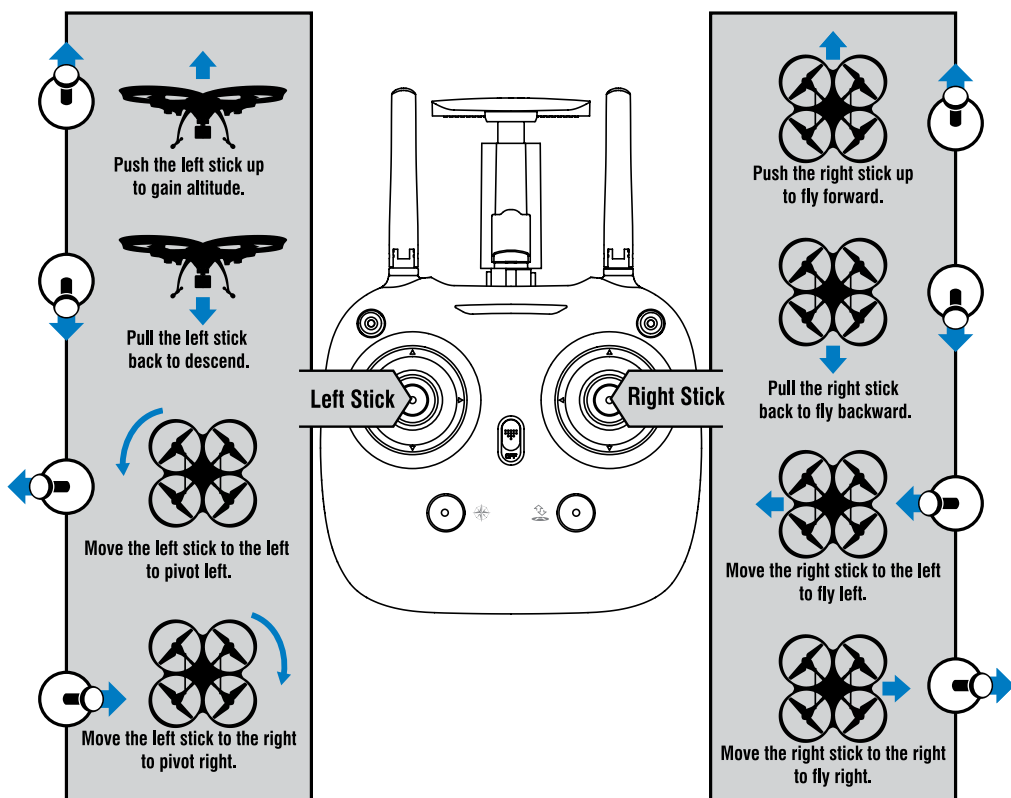
8. Once the remote is paired and the Titan is calibrated, the motors will need to be unlocked before you fly. To unlock the motors move the left thumbstick to the right and downward position while also moving the right thumbstick to the left and downward position as shown in the diagram.



When done correctly the rotor blades will spin waiting for take off

PLEASE NOTE: For a quick take off that will skip the step of unlocking the

motors, press the auto take off button  on the remote control after calibration. This will instruct the Titan to take off and hover at shoulder height.



Once the remote has been paired with the Titan drone, do not approach the drone until the remote has been powered off.

4.1.0 TROUBLE SHOOTING

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

- a) The Titan battery is fully charged, correctly connected and not damaged.
- b) The batteries in the Remote Control are of 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 Titan may not have been completed correctly. Ensure that when activating the connection, the **Left Thumb stick** (Acceleration/Yaw) is moved all the way to the bottom and then returned to the middle. If this is not completed the connection will not activate.

Once these points have been checked turn both the Titan and the Remote Control off and start the launching process again.

4.1.1 ONE BUTTON TAKE OFF/LANDING

The one button take off and landing button allows you to easily get your drone off the ground and land.

TO TAKE OFF:

Follow the powering up and pairing instructions in this manual. Once the drone is paired to the controller press the one button take off/land button, and the drone will take off and hover at about shoulder height.

TO LAND:

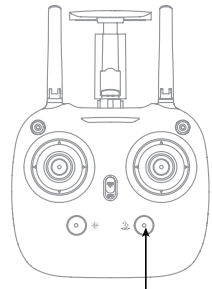
While flying to bring the drone down, quickly press the one button take off/land button. The drone will then descend and land.

EMERGENCY LANDING:

If you need to bring the drone down in an emergency, while flying, hold the one button take off/land button. The motors will stop completely and the Titan will fall to the ground.

PLEASE NOTE: When using any land function, make sure that there are no obstacles, people or animals under the drone.

Do not use the emergency stop function unless it is an emergency situation as this will cause the motors to lock, and the drone to free fall.



Take Off / Landing

4.1.2 ALTITUDE HOLD

Altitude hold allows the drone to hover and maintain a constant height making aerial photography easy.

To use altitude hold, allow the left thumb stick to fall back to its default middle position.

4.1.3 SPEED MODES

The Titan drone has three speed modes.

To cycle through the speed modes, use the speed button on the rear of the controller. Each mode will be identifiable by a series of beeps.

Low Speed Mode: One beep

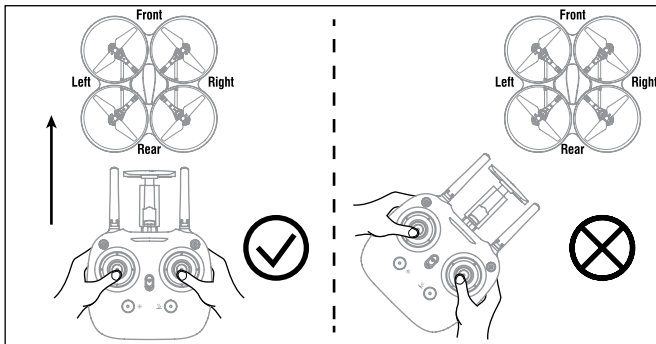
Medium Speed Mode: Two beep

High Speed Mode: Three Beeps

4.1.4 DIRECTIONAL LOCK

Directional lock allows you to lock the controllable forward direction so that no matter which way the drone is facing, pressing forward on the right thumb stick will always send the drone in the direction you have assigned as forward. To set directional lock follow the instructions below.

1. After powering up the Titan and pairing the controller, place the Titan facing the direction that you want to assign as forward.
2. Move directly behind the Titan, facing the same direction as the drone.
3. Press the Directional Lock button to set your forward direction.



Directional Lock will now be set and your preferred orientation will be set.

PLEASE NOTE: Do not attempt to set Directional Lock when you are already flying. Be sure to remember your set orientation when you are flying in Directional Lock mode

4.1.5 OUT OF RANGE ALARM

The remote will give a warning when the Titan is leaving the controllable range of the Remote Control.

This warning will be issued in a series of double beeps "beep beep... beep beep...".

When this alert is active, please direct the drone back towards the controller.

4.1.6 LOW BATTERY ALARM

When the Remote Control battery is low the Remote Control will issue a slow series of beeps, signalling that the batteries need to be replaced.

When the Titan battery is running low, the remote will issue a fast series of beeps, signalling that the battery needs to be recharged.

PLEASE NOTE: Do not ignore low power warnings as this may result in unplanned landings.

4.1.7 MOTOR LOCK DOWN

When the rotor blades are stopped by an obstacle the motors will go into protective lock down.

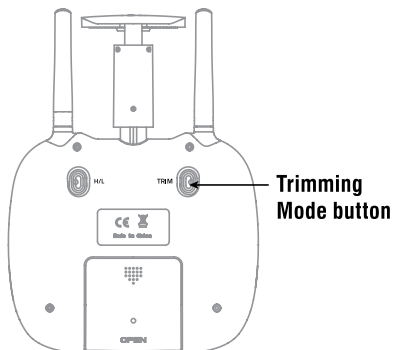
To unlock the motors make sure the rotor blades are clear from debris and put the Titan back on the ground. Once you are ready to fly again pull the left thumb stick back and the motors will release.

4.1.8 TRIMMING

Trimming is used to balance out your drone if it is drifting when flying.

To adjust the trimming please follow the steps below.

1. Make sure that the Remote Control and Titan are switched on and correctly paired.
2. Hold the Trimmer button on the rear of the Remote Control.
3. While still holding the Trimmer button use the right thumb stick to counter the direction that your Titan is drifting.
4. As you are adjusting the trimming the beep tone will go lower the more that you trim in any directing.




PLEASE NOTE: If Trimming is not fixing the drones drifting, you may need to re calibrate your drone by turning off the drone and the controller and restarting the instructions in the **Getting Started** section of this manual.

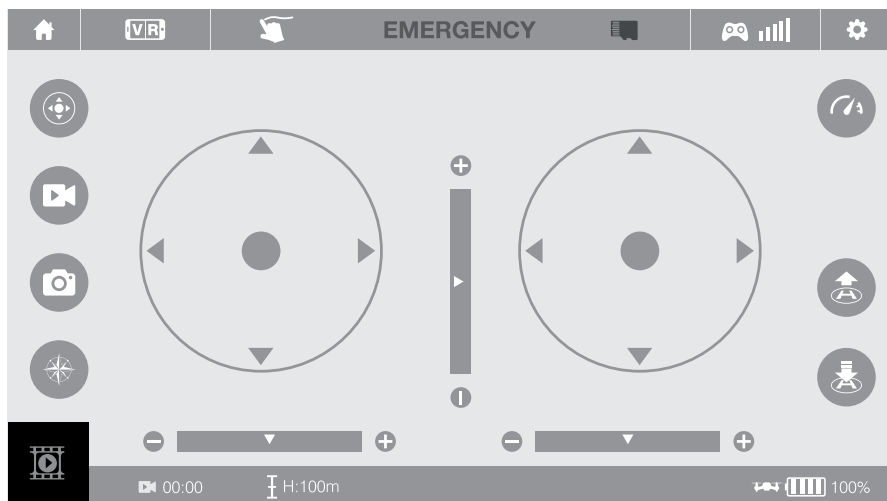
5. APP NAVIGATION

Once you have connected your Smart-phone to the Titan via WiFi and launched the Zero-X Titan App, you will be able to access the App's App Control screen. This screen has all of the control options and settings, as well as access to the on screen control system.

If you want to only use your smart phone to control the Titan drone, use the 'App Control' setting and press the  button to show the on screen controls.

To use the App to assist the controls on the remote control, use the 'Control Assist' setting and press the  button to show the on screen controls. In this mode the controller must be used for take-off.

5.1.0 APP CONTROL SCREEN



5.1.1 APP ICONS

HOME PAGE

When selected, this will take you back to the home page

FPV

This will split the screen into two so that it can be used in a smart phone compatible VR headset (Headset not included).

This mode should be used with the controller.

Please obey your local aviation laws when using FPV mode.

FLIGHT PATH TRACING

This allows you to trace a flight path for the drone to follow.

Please make sure you have enough space where you are flying for the drone to follow your drawn path.

EMERGENCY **EMERGENCY STOP**

Pressing this will cause the Titan's motors to stop and the drone will fall to the ground.

Only use this in the case of an emergency.

MICRO SD CARD

This will show is a micro SD card is inserted in the Titan's on board camera.

When there is no Micro SD Card detected the  icon will be displayed.

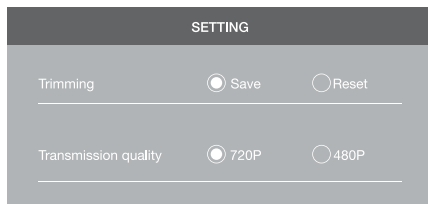
When a Micro SD Card is detected the  icon will be displayed.

REMOTE CONTROL SIGNAL

Displays the Titan's WiFi signal strength.

SETTINGS

Settings will allow you to set your transmission resolution and trimming.



ON SCREEN CONTROLS

This will give the option of Stick Controls or Tilt Controls



STICK CONTROLS

Allows you to control the Titan with two on screen virtual thumb sticks.

TILT CONTROLS

Allows you to control with a virtual left thumb stick and the right thumb stick can be controlled by tilting your smart phone

VIDEO

Selecting this will start a video recording.

PHOTO

Selecting this will capture a photo.

DIRECTIONAL LOCK

Selecting this will engage Directional Lock mode.

Please read the Directional Lock section of this manual before activating Directional Lock.

MEDIA

This will take you to all recorded files both on your phone and saved to the Micro SD Card installed in your Titan drone (Micro SD Card not included).

SPEED MODE

Select your required speed mode.



ONE BUTTON TAKE OFF

This button will launch the drone.

When selected, the drone will take off and hover at about shoulder height.



ONE BUTTON LANDING

This button will initiate the automatic landing sequence.

Please be sure there are no obstructions, people or animals under the drone when this is selected.



ALTITUDE HOLD

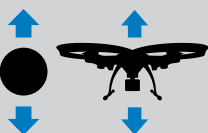
Shows the drone's current altitude.



100%

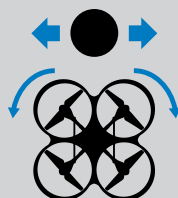
DRONE BATTERY INDICATOR

This displays the drone's battery level.



To fly up or down:

Move the Left Ball up to gain altitude and move the Left Ball down to descend.



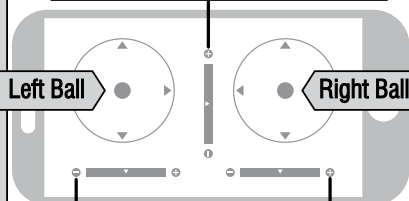
To rotate left or right:

Move the Left Ball to the left to pivot left. Move the Left Ball to the right to pivot right.

If the drone tilts forward or backward

Click the "-" of the Forward / Backward Trimmer to adjust the drone's balance if the drone is drifting forward. Click the "+" to adjust the drone's balance if the drone is drifting backward.

Left Ball



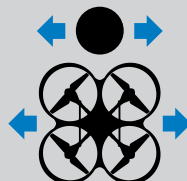
Right Ball

If the drone rotates to left or right

Click the "+" of the Rotation Trimmer till balance if the drone rotates left. Click the "-" to adjust the drone till balance if the drone rotates right.

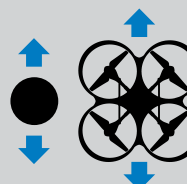
If the drone tilts to the left or right

Click the "+" of the Left / Right Trimmer to balance the drone if it is drifting to the left. Click the "-" to adjust the drone's balance if the drone is drifting to the right.



To fly right or left:

Move the Right Ball to the left to fly the drone to the left, and move the Right Ball to the right to fly the drone to the right.



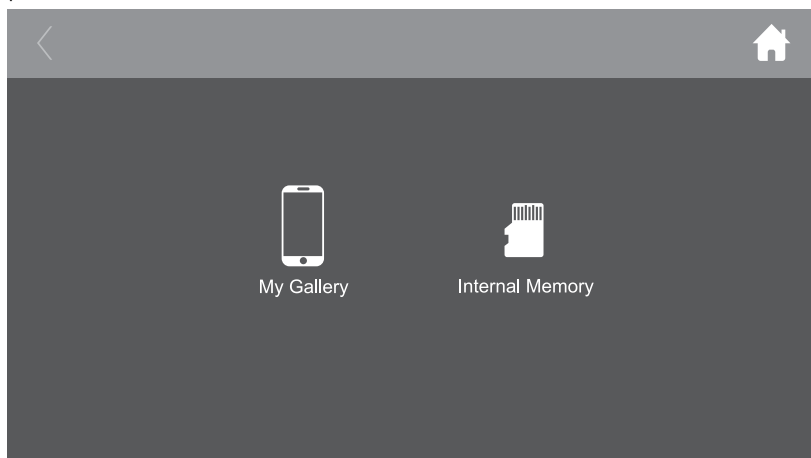
To fly forward or backward:

Move the Right Ball up to fly the drone forward, and move the Right Ball down to fly the drone backwards.

6. VIEWING AND TRANSFERRING PHOTOS AND VIDEOS

To view your photos and videos select the Media setting from the home screen.

From this screen, you can select whether you want to view the files recorded to the inserted Micro SD Card, or the files that have been transferred to your phone.



From either of these libraries you can view and transfer your videos and photos.

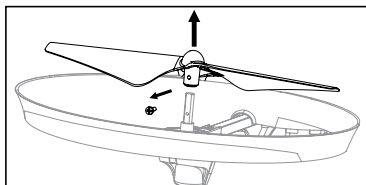
7. MAINTENANCE

7.1.0 REPLACING ROTOR BLADES

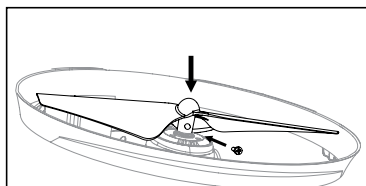
If your rotor blades become damaged or the Titan drone is no longer flying straight the rotor-blades may need to be replaced.

To replace the Titan's Rotor Blades please follow the directions below.

1. Remove the screw securing the rotor blade, and lift the blade off taking note whether the blade is an 'A' blade or a 'B' Blade.



2. Press the replacement blade onto the stem making sure that the screw holes align and the replacement rotor blade is the same ('A' or 'B') as the original rotor blade. Once the rotor blade is in position replace the securing screw.



7.1.1 REPLACEMENT PARTS

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**
- **Feet**
- **Clockwise Motor**
- **Rotor blades**



Visit **www.zero-x.com.au** to make your purchase.

8. SPECIFICATIONS

Dimensions	33cm x 33cm x 12.5cm
Weight	280g
Resolution	720P
Channels	4
Battery	1000mAh
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)

9. 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:

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Email: service@zero-x.com.au

titan

Capture the skies.™

ZERO-X

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