

Ages: 14+

zerogravity

TALON HD



User Guide

PCT[®] BRANDS

Congratulations on your purchase of the ZeroGravity Talon HD drone. This sleek, high-flying drone lets you dominate the skies with razor-sharp precision and reliable performance for adventures in aviation. Before lighting up the skies with your ZeroGravity Talon HD Drone, please read this manual thoroughly so you can be sure to get the maximum amount of soaring excitement from every charge! For online tutorials and our Video Flight School, please visit www.myzerogravity.com

Specifications

Length: 15.75"
Width: 12.79"
Height: 3.15"
Blades: 5.39"
Weight: 4.58 oz.
Flight Range: 300 ft. Flight Range

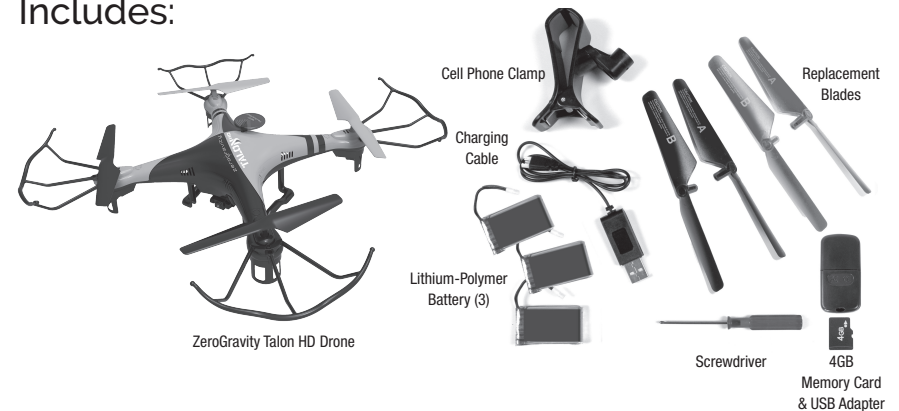


2.4GHz Controller



User Guide

Includes:



ZeroGravity Talon HD Drone

Cell Phone Clamp

Charging Cable

Lithium-Polymer Battery (3)

Screwdriver

Replacement Blades

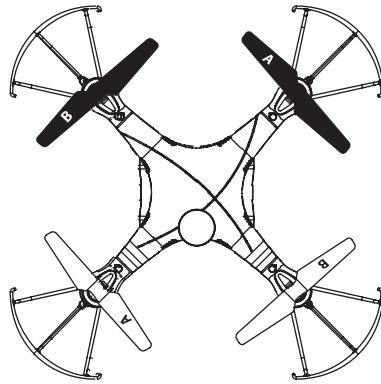
4GB Memory Card & USB Adapter

Important Information

- The ZeroGravity Talon HD Drone is designed for users age 14 and up.
- Do not touch the blades when they are in motion.
- Do not touch the motors during or immediately after flight, as they can be hot.
- Do not overcharge your ZeroGravity Talon HD Drone, and never charge unattended.
- Only fly your ZeroGravity Talon HD Drone in an open, obstacle-free environment. Keep the ZeroGravity Talon HD Drone a minimum of nine feet from yourself and others.
- Do not fly the drone outdoors in rainy conditions or when the temperature is excessively hot or cold.
- Avoid flying in windy conditions, as this will make it difficult to control your drone.
- Avoid hard crashes or landings as your drone may become damaged.
- If your drone becomes damaged, replace the broken parts immediately. Flying your drone when it is damaged can result in poor performance or even injury.
- If you find that your drone is difficult to control or slow to respond, it may indicate that you need to recharge the drone's battery or replace the batteries in your Controller.
- Flying your drone at a height of approximately 12 inches may cause it to experience "ground effect." This is common with drones and is caused by the propellers creating a vortex due to the close proximity to the ground, resulting in instability. This is easily remedied by flying higher than the ground effect zone of approximately 12 inches.

Installing/Replacing Blades

Two complete sets of blades are included with your ZeroGravity Talon HD Drone. Before attempting to operate, please install the blades using the instructions below. Should the blades ever become damaged please replace immediately – do not continue to fly your drone with damaged blades. When replacing the blades, please note that you must place black blades on the front and color blades on the back. Please note the diagonal position of the A and B blades.



To install/replace the blades:

1. Using the included mini-screwdriver, remove the screw on the blade post and lift the blade (Note for first use locate the mounting screws in the packaging).
2. Slide the replacement blade on the axle, making sure that the pre-drilled holes on the blade line up with the pre-drilled holes on the axle.
3. Reinsert the screw and tighten.

Important Blade Guard Information: Following repeated crashes, the blade guards may become twisted or misshapen and interfere with blade performance. Should this occur, please reshape the blade guards so they do not impede the blades from moving freely. Do not attempt to fly your drone if the blades are catching on the blade guard, as you will not be able to properly control it.

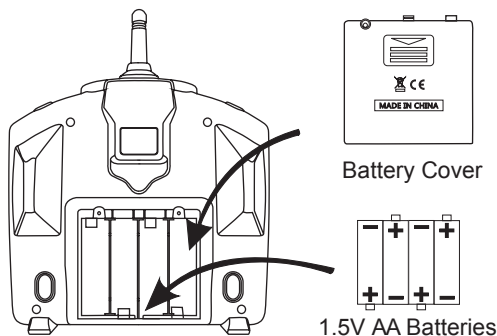
Controller

Installing the Controller Batteries (Not Included)

NOTE: For optimal performance, never mix old and new batteries, and do not mix different types of batteries, such as alkaline batteries with rechargeable batteries.

1. Remove the battery cover from the back of the controller and insert four AA batteries, making sure that they are correctly aligned (+ to + and - to -).
2. Replace the battery cover.

When the batteries in the Controller are low on power, the Controller will emit a series of beeps and the battery icon on the Controller's LCD display will blink. Replace the batteries in your Controller when this occurs.



Charging Your ZeroGravity Talon HD Drone

Battery Warning

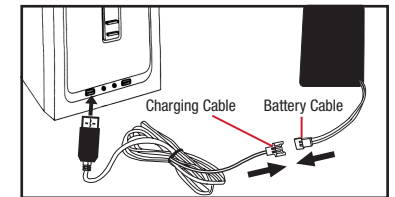
Your ZeroGravity Talon HD Drone uses a standard Lithium Polymer battery. These batteries can expand, burst, or catch fire if used incorrectly. It is important to follow the charging instructions below exactly as indicated, including observing all safety precautions noted.

- Do not recharge battery immediately after using your ZeroGravity Talon HD Drone, you must wait 30 minutes before charging to allow the battery to cool down to room temperature.
- Do not leave unattended when charging.
- Use only the Charging Cable included with your ZeroGravity Talon HD Drone.
- Charge only on a non-flammable, heat-resistant surface.
- Immediately disconnect the Charging Cable once the Charging Indicator turns red.
- Lithium Polymer batteries have a finite lifespan. If you find that your battery no longer holds a charge – or if it has become damaged in a crash – replace it immediately with a new battery.
- To prolong the life of your battery, we recommend that you do not completely drain the battery before recharging.

To Charge

Please note that the average time to fully recharge the battery is 90 minutes.

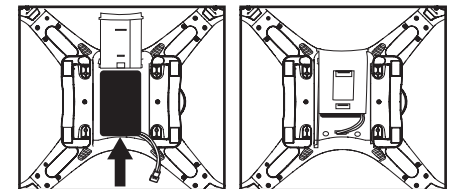
1. For easy access to the battery compartment, first remove the camera.
2. Slide the battery cover in the direction indicated and open (note that the battery cover is affixed to the body of your drone and will open wide enough to allow free access without removing).
3. Remove the battery from the battery compartment.
4. Plug the USB end of the Charging Cable into an available USB port on your PC or USB charging device; a red LED light will appear on the Charging Cable. Plug the charging end into the Battery Cable, making sure that they are correctly oriented for a proper fit; the red LED light on the Charging Cable will turn off, indicating that the battery is charging (see below).
5. Plug the other end of the Charging Cable into your battery. The LED charging light will turn off, indicating the battery is charging. If the LED light does not turn off, your battery is fully charged.
6. When the red LED light on the Charging Cable illuminates, charging is finished. Unplug the Charging Cable from both the battery and your PC's USB port. Do not leave the battery connected to the charger once it is fully charged.



Turning Your ZeroGravity Talon HD Drone On/Off

Your ZeroGravity Talon HD Drone does not require an On/Off switch; to turn your drone on or off, simply plug in/unplug the battery cable.

1. Remove the camera to provide easy access to the Battery Compartment.
2. Open the Battery Compartment.
3. Plug the battery cable into the Power Socket, making sure they are correctly oriented for a proper fit.
4. Unplug the battery cable to turn off your drone.



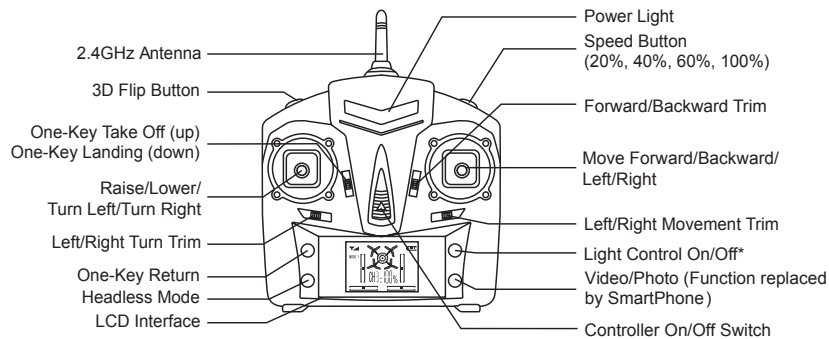
Flying Your Drone

Your ZeroGravity Talon HD Drone is designed with innovative gyroscopic technology that delivers reliable performance with every flight. Please read all of the instructions below to get the most out of all of your drone's many fantastic features.

Note: For maximum flying enjoyment, please make sure you familiarize yourself with the controls and functions of your ZeroGravity Talon HD Drone. Start slowly until you're comfortable with the basics.

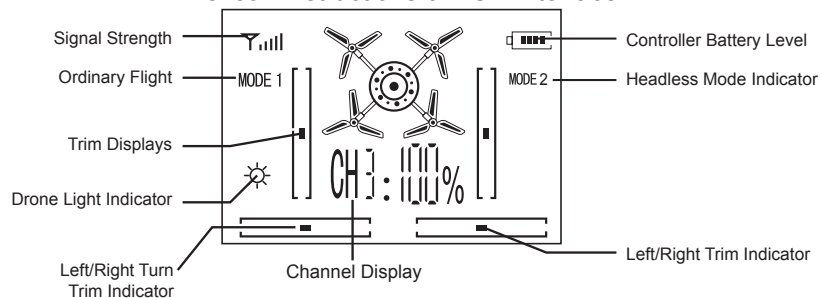
You can turn your drone's lights on or off by pressing the Light Button on the Controller.

1. With the battery connected, place the drone on level ground. The drone's lights will slowly flash.
2. Slide the Controller's On/Off Switch to the On position. The Controller will beep several times, indicating that it's searching for the correct frequency.
3. To calibrate the gyroscope, simultaneously pull the Controller's two joysticks down and diagonally inward; the lights on your drone will flash momentarily and then remain lit. Release the joysticks.



*Note: One click of the Light Control Button turns the drone's lights on/off. Press and hold to turn the controller's lights on/off.

The icon instructions of LCD interface



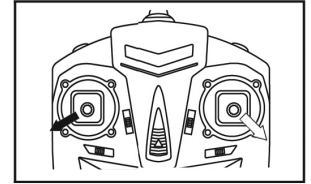
Note: You will enjoy approximately 7-8 minutes flight time from a full charge. Your ZeroGravity Talon HD Drone includes three batteries that, used consecutively, deliver an approximate total flying time of 21 minutes.

Flight

This covers the basics of manual flying. Please see the next section for details on the easy-to-use One-Key Functions available for your ZeroGravity Talon HD Drone. **Note:** You'll enjoy up to 7-8 minutes of flying time on a full charge per battery.

Turning on the Blades

To turn the blades on, simultaneously pull the left joystick to 7 o'clock and the right joystick to 5 o'clock. Repeat this step to turn the blades off.



Auto-Hover

Your ZeroGravity Talon HD Drone features auto-hover technology. This innovative function helps your drone maintain its hovering altitude—even automatically returning to its hovering position should it lose altitude. This feature is always active and will keep your drone at whatever altitude you make it hover.

Basics of Flying

The left joystick controls the directions of your drone, raising and lowering it and turning left and right, while the right joystick moves your drone forward, backward, and side-to-side. Become familiar with these controls, start slowly, and have fun as you become comfortable with the basics of flying your ZeroGravity Talon HD Drone.

Ascending ↑ Descending ↓	To ascend, slowly push the left joystick forward. To lower the drone, slowly pull back on the left joystick	
Turn right Turn left	To turn the drone left, move the left joystick to the left. To turn to the right, move the left joystick to the right.	
Forward ↑ Backward ↓	To fly forward, slowly move the right joystick forward. To fly backward, slowly move pull back on the right joystick.	
Left Sideways ← Right Sideways →	To fly sideways left, slowly move the right joystick to the left. To fly sideways right, slowly move the right joystick to the right.	

Flight Speed

You can adjust the flight speed by pressing the Speed Button on the right shoulder of the Controller. Repeatedly pressing the Speed Button will cycle through the available speeds. Your drone will start at 20% of full speed, press the Speed Button to increase to 40% (indicated by two beeps). Pressing again, will increase speed to 60% (indicated by three beeps), and pressing again will increase speed to 100% (indicated by four beeps).

One-Key Functions

Your ZeroGravity Talon HD Drone offers several simple functions that make flying even easier with just the push of a button.

One-Key Take-Off

Press the One-Key Take-Off/Landing Switch forward to the Up position to make the drone automatically ascend. Note that you can use the right joystick to move your drone forward, backward, and left and right while using the One-Key Take-Off feature.

One-Key Landing

While hovering, press the One-Key Take-Off/Landing Switch to the Down position and the drone will automatically land. **Note:** Allow drone to finish landing and for the blades to come to a complete stop before re-starting or using One-Key Take-Off.

One-Key Return

This feature marks your drone's forward position when you calibrated your drone preflight. Pressing the Return Button will make your drone fly backward in relation to this starting position. Note that your drone will not stop, but will continue to fly in this direction until you resume control by pressing the Return Button again.

Headless Mode

Headless Mode makes it even easier to fly your drone and is a great way for beginners to become comfortable with flying. Under ordinary flight mode, flight control is based on the drone's position (for example, if you move the joystick to the left, the drone will move to its left, so if the drone is facing you, it will actually move to your right – this can be a bit confusing for beginners). With Headless Mode, your drone is synced with your perspective, so moving the joystick left, for example, will always move the drone to your left, even if it's facing you.

To enable Headless Mode:

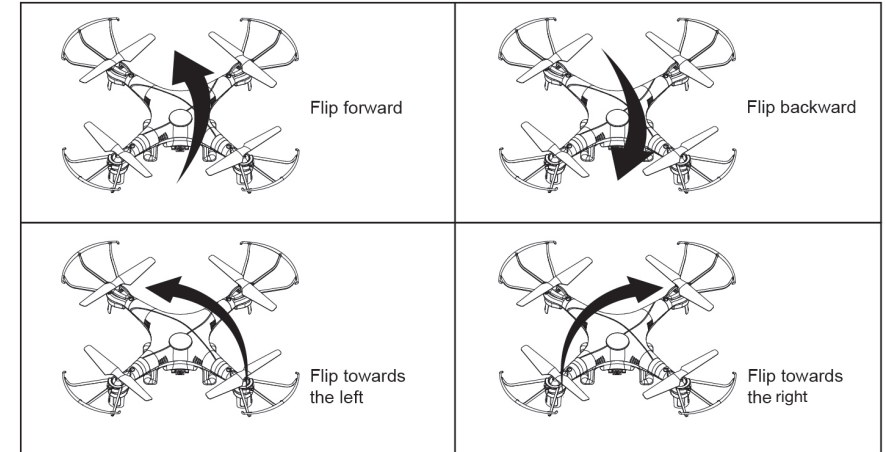
1. Place the ZeroGravity Talon HD Drone on a level surface with the front of the drone facing directly away from you and press the Headless Mode Button on your Controller.
2. While enabled, your drone will be synced to your perspective; no matter which direction the drone is facing, it will always move to your orientation – move the joystick left and the drone will move to your left, move the joystick forward and the drone will move away from you, push the joystick down and the drone will move towards you.
3. To disable, press the Headless Mode Button again.

Note: When flying in Headless Mode, any objects your drone may strike may make the drone fly askew.

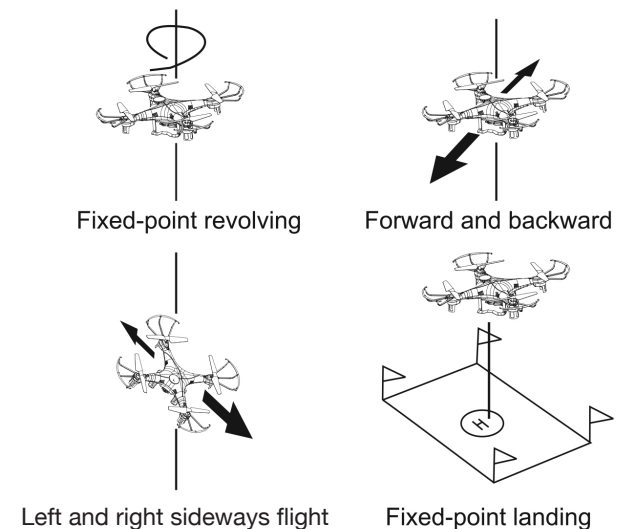
Stunt Flying

Once you're comfortable with the basic control of your ZeroGravity Talon HD Drone, it's time to try some awesome flips! It's as easy as pushing a button and moving the joystick, see the instructions below on how to perform this amazing stunt flying technique.

While your drone is a minimum of nine feet off the ground, press the Flip Button on the left shoulder of the Controller. When the Controller beeps, move the right joystick in the desired direction of the flip – forward for a forward flip, back for a backward flip, right for a right flip, and left for a left flip.



Practice Flying

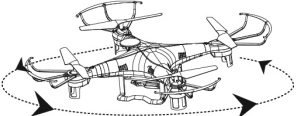
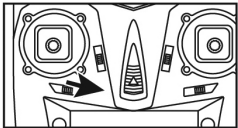
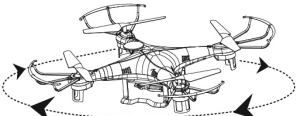
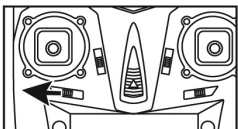
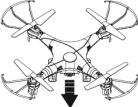
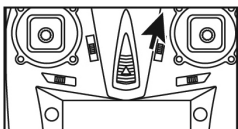
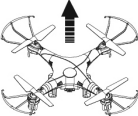
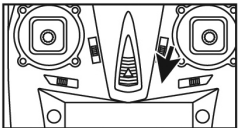
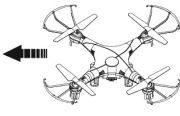
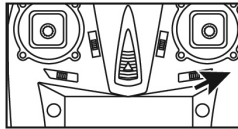
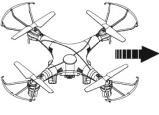
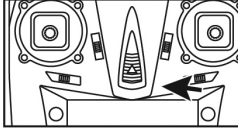
 Try these exercises to become a drone master.

Trim

Your ZeroGravity Talon HD Drone is designed to hover in place. If you notice that it is rotating or moving when hovering, a quick and easy Trim adjustment will correct any stabilization issues you may encounter.

Note: Flying your drone at a height of approximately 12 inches may cause it to experience “ground effect.” This is common with drones and is caused by the propellers creating a vortex due to the close proximity to the ground, resulting in instability. This is easily remedied by flying higher than the ground effect zone of approximately 12 inches.

How to Adjust Trim for Stabilization

 If your drone spins counter-clockwise while hovering, press the Left/Right Turn Trim Switch to the right until the drone stops turning.	
 If your drone spins clockwise while hovering, press the Left/Right Turn Trim Switch to the left until the drone stops spinning.	
 If your drone flies backward while hovering, press the Forward/Back Trim Switch forward until the drone stops moving.	
 If your drone flies forward while hovering, press the Forward/Back Trim Switch down until the drone stops moving.	
 If your drone flies to the left while hovering, press the Left/Right Movement Trim Switch to the right until the drone stops moving.	
 If your drone flies to the right while hovering, press the Left/Right Movement Trim Switch to the left until the drone stops spinning.	

Taking a Picture/Video

Note: You can use your smartphone to stream live camera images while flying; if you choose, you can also control your drone using a smartphone.

Your ZeroGravity Talon HD Drone features an adjustable camera that lets you wirelessly stream video of your flight in real time right on your smartphone. You can also save photos and videos directly to your smartphone in addition to saving them on the included 4GB Memory Card.

Inserting MicroSD Card into the Camera

Your ZeroGravity Talon HD includes a 4GB Memory Card and Memory Card Adapter.

Insert the 4GB Memory Card into the drone's camera slot, making sure it is correctly oriented.

Using with Your Smartphone

1. Using a QR reader app on your smartphone, scan the QR codes below to download the free Talon HD app (available for Android and iOS). Note: Your app store offers a variety of free QR Reader apps. Alternatively, you can search “Talon HD” in your app store.
2. Affix the Smartphone Mount to the Controller and insert your smartphone.
3. Turn on your ZeroGravity Talon HD Drone and plug the camera into the camera power port. When the red light on the bottom of the camera slowly flashes, it indicates that it is awaiting a smartphone connection.
4. On your smartphone, enter Settings, turn on Wi-Fi, and select “Talon HD.” This will allow the camera's Wi-Fi to stream to your smartphone.
5. Exit settings on your smartphone and open the Talon HD smartphone app.
6. To take a photo or video, press the respective button in the app. This will save the photo/video to your smartphone and the Memory Card in the camera.
7. The resolution of saved videos is 640 x 480 on your smartphone and 1080p x 720p on the Memory Card.

Viewing/Playing Photos/Videos on Your Smartphone

To view a photo or video on your smartphone, select the Photo/Video Playback button on the app and choose either the photo or video album, and select to view/play back. You can also delete any photos/videos by tapping select in the album menu, tapping the photo/video you want to delete, and then tapping the delete button.



Android



iOS

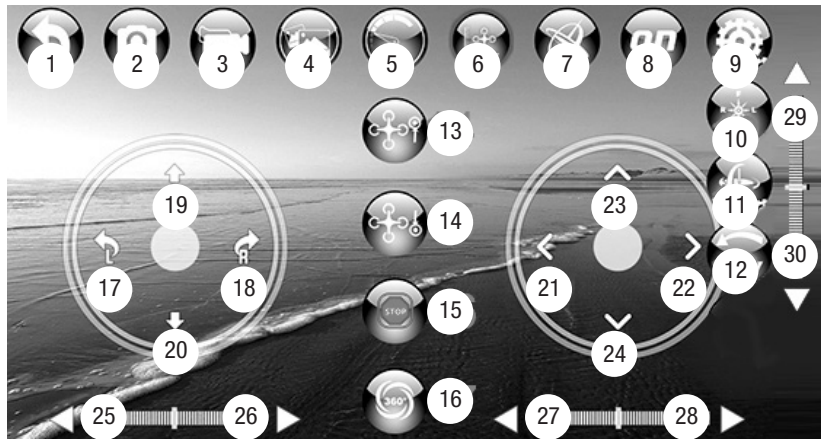
Transferring Photos and Videos to Your PC

Follow these simple steps to transfer your photos/videos to your PC:

1. With the camera unplugged from the camera power port, remove the Memory Card from the camera.
2. Insert the Memory Card into the included USB Adapter and insert into the USB port of your PC.
3. Open the Memory Card on your PC and drag your photos/videos to the PC folder you choose.

App Guide For iOS® and Android™

1. Return to the previous screen.
2. Press to take still photo.
3. Press to begin video recording. Press again to turn off.
4. Press to open photo/video playback options.
5. Speed control, 30%, 60%, and 100% full speed.
6. Select this button to open up additional options, including One-Key Take-Off/Landing, Emergency Stop, and Flips (see numbers 13 – 15 below).
7. Gravity Sensor Mode allows you to control your drone by tilting your smartphone.
8. Show/Hide Control Interface.
9. Show/Hide Set-Up Menu. Select this button to open the Headless Mode, Calibration, and Camera Inversion Options (numbers 10 – 12).
10. Enter Headless Mode. Press again to exit Headless Mode.
11. Calibration key. This allows you to calibrate your controls (performing the same function as pulling down diagonally inward on your Controller).
12. Camera inversion reverses the image.
13. One-Key Take-Off.
14. One-Key Landing.
15. Emergency Stop – tap this icon to immediately stop your drone. This emergency option lets you avoid damage to people or property should your drone begin flying out of control.
16. Flip function – select this icon and move the right joystick forward, backward, left, or right to choose the direction of the flip.
- 17/18 Turn Left/Right
- 19/20 Ascend/Descend
- 21/22 Move Left/Right
- 23/24 Move Forward/Backward
- 25/26 Left/Right Turn Trim
- 27/28 Left/Right Move Trim
- 29/30 Forward/Backward Trim



Troubleshooting

Problem

Controller not working.

Solution

Verify that the Controller On/Off Switch is in the On position.

Make sure that the batteries are inserted correctly regarding the + and - polarity.

The batteries may be drained; replace them with new batteries.

Problem

Drone does not fly.

Solution

Make sure the battery is fully charged, that the controller or phone is synced, or that you re-set for launch by returning the joysticks to the 7 o'clock and 5 o'clock positions.

Problem

Hard or abrupt landings.

Solution

Pull down slowly on the left joystick for a smooth and gentle landing, or use the One-Key Landing feature.

Problem

Drone is out of control.

Solution

The drone has exceeded the effective control distance of approximately 300 feet, or you need to recalibrate the drone by pulling both joysticks all the way down diagonally inward to reset the frequency after landing on a flat surface.

Problem

Drone shakes or moves erratically when hovering or flying and is not corrected by adjusting trim.

Solution

The blade may have become damaged; replace the blade.

How to Properly Dispose of Batteries

This product contains a Lithium Polymer battery. To properly dispose of expired batteries, view your city's website or newsletter to find what guidelines, if any, should be followed and to make note of their hazardous waste collection days.

Notes

Battery Warning

Lithium Polymer batteries can expand, burst, or catch fire if used incorrectly, causing both property damage and or personal injury. It is essential that you follow all the included instructions and safety warnings in full. The manufacturer, distributors, and retailers will assume no liability for the failure to comply with these safety instructions and warnings.

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: a) Reorient or relocate the receiving antenna b) Increase the separation between the equipment and receiver c) Connect the equipment into an outlet different from that to which the receiver is connected d) Consult the dealer or an experienced radio/TV technician for help.

Note 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

90-Day Limited Warranty

PCT Brands, LLC warrants this product to be free from defects in materials and workmanship. This warranty covers the original purchaser only, and is not transferable to anyone who subsequently buys, leases, or otherwise obtains from you. Your 90-Day Limited Warranty begins on the date of purchase. Your original purchase invoice or sales receipt, showing date of purchase, is your proof of warranty period. The duration of this warranty does not extend beyond the initial period of coverage should any repairs or replacements be made or performed.

This warranty does not extend to any product not purchased from PCT Brands, LLC, or an authorized PCT Brands, LLC reseller. This warranty does not extend to product that has been damaged or rendered defective as a result of use for which the product is not intended, is contrary to instructions provided in the user manual, as a result of the use of parts not manufactured or sold by PCT Brands, LLC, or due to any misuse, abuse, negligence, modification, or improper packing when returning product to PCT Brands, LLC.

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How Do I Obtain Warranty Service?

For warranty service, please email warranty+zerogravitytalonhd@pctbrands.com or call (248) 236-0061 to report a claim, at which time PCT Brands, LLC technicians will attempt to solve any issues. If unable to resolve your issue, you will be issued an RMA to authorize the return of the item for repair/replacement. All charges incurred while returning product, including postage, duties, export taxes, and customs duties, are the responsibility of purchaser, and purchaser assumes all risk of loss during shipment. For more information visit www.pctbrands.com



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For online tutorials and our Video Flight School, please visit
www.myzerogravity.com

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