Quick Start Guide

1 - Drone Overview
2 - Transmitter Overview
4 - Disclaimers, Warnings & Guidelines
6 - Charging the Drone Battery / Live Feed Screen
7 - Preparing the Live Feed Screen
8 - Preparing the Transmitter
9 - Installing the Rotors and Drone Battery
10 - Drone Status Indicator
11 - Calibrating the Drones Compass
11 - Preflight Checklist
12 - Take Off
13 - Transmitter Operations
14 - Flight Modes
15 - Landing the Drone
16 - Drone Battery Notes
17 - Limitation of Liability
TRANSMITTER OVERVIEW

FRONT

- GPS Signal Strength
- Trimming Buttons T1-T4
- Left Stick
- Right Stick
- Power Switch
- Power Indicator
- Warning (Low Battery / Weak Signal)
- Drone Battery Level
- Flight Height
- Flight Speed
- Flight Distance
- Flight Position

BACK

- Sunscreen Shade
- Video Output
- Charging Port
- Power Indicator
- Channel Selector
- Live Feed Screen Antenna
- Screen Bracket
- Side Locking Screw
- Neck Strap Attachment
- Power Switch
- Power Button
- Gimbal Joystick
- Battery Compartment Cover
Disclaimers, Warnings & Guidelines

Please read this disclaimer and warning carefully before flying this drone.

1. Please make sure you are familiar with the features and functions of this drone before operating. Incorrect or failure to operate this drone in a responsible way may cause injury and physical damage.

2. This drone is not suitable for people under the age of 14.

3. The drone has autonomous functions that makes operation as safe as possible but still requires the user to be aware of the drones actions at all times. Practicing the functions before installing all rotors is recommended.

4. You are responsible for all flight conduct of this drone and any consequence or damage caused by this drone.

5. By using this product you are agreeing to comply with all local and federal regulations, terms and any applicable policies and guidelines.

6. Only use this drone in a suitable environments and for proper purposes.

7. Any part of this disclaimer is subject to change without notice, please visit worldtechtoys.com to download the latest version for reference.

8. For the best flying experience only use genuine World Tech Elite accessories.

9. Remove all rotor blades before calibrating or changing parameter settings.

10. Adhere to all local laws and rules in your area before flying, you are solely responsible for all conduct and actions while you are flying.

11. Check all connections (Check rotor blades and that motors are installed properly and firmly) to ensure that every part is in normal working condition before flight.

12. Damaged rotor blades should be replaced immediately.

13. Stay away from people, crowds, high voltage lines and any other obstacles that may cause interference during operation.

14. Check that the position of all switches on the transmitter is set correctly before operation.

15. Check that the transmitter has fresh batteries and that the drones battery and live feed display are fully charged.

16. Do not fly near areas with electric or magnetic interference. For example, radio and TV sources, high voltage lines, communication stations, radar and satellite installations, etc.
Charging the Drone Battery / Live Feed Screen

- The battery should only be charged with the supplied World Tech Elite smart balance charger.
- Plug the charger into a standard US outlet and connect the battery to charger with the supplied cable (Figure 1). The smart balance charger LED will be red when charging. When the battery is fully charged the LED will turn green (Figure 2).
- **Drone Battery charge time is approximately 150 minutes.**

- The Live Feed Screen has a built-in rechargeable battery that can be charged via USB with a PC or USB wall charger (Figure 3). The Live Feed Screen displays a red LED to show the charging status, the battery is fully charged when the LED turns green.
- **Live Feed Screen charge time is approximately 4 hours.**

Preparing the Live Feed Screen

- Attach the screen holder to the metal transmitter handle (1) and secure with two screws. Lock the screen holder in place by securing it to the side of the metal handle with the side locking screw (2) position the holder so it is secure before locking in the Live Feed Screen.

- Press and hold the screen holders lock button in (3) and push the Live Feed Screen into place at an angle until it is secure and flush with the mount (4), release the lock button. Install the Live Feed Screen antenna by screwing it into the antenna port until secure (5).
Preparing the Transmitter
- Set the transmitters switches L1 (Figure 1) and L2 (Figure 2) to the Middle Position.
- Install 6 AA batteries into the battery compartment on the back of the transmitter, pay attention to the positive and negative polarities (Figure 3).
- Turn on the transmitter by moving the switch to the right (Figure 4).

Installing the Rotors and Drone Battery
- Match the spinning direction noted on each rotor to the correct motor on each arm of the drone (Figure 1). Attach the rotors by placing on the threaded motor peg on each arm of the drone. Tighten each rotor nut with the supplied rotor wrench (Figure 2) to secure each rotor to its corresponding motor, tighten by holding the motor in place and tightening in the direction opposite of the arrow direction for each arm.
- Press the two triangular buttons once to check the drone battery level (Figure 3).
- Push the drone battery into the battery compartment with the battery indicators at the top until secure and the drones lights turn on (Figure 4).
- Press the two triangular buttons for 3 seconds (Figure 4) to turn on the drone battery level indicators before flying the drone.

The gimbal joystick is located on the back of the transmitter and controls the up, down and left to right movements of the camera. Each axis moves within a 90 degree radius.

To capture photos or video set the R1 switch to one of the positions shown below to choose your cameras mode. Flip the R2 switch to take a photo or start/stop recording video.

R1 Up Position: Recording Video Mode
R1 Middle Position: Camera Setting Mode
R1 Down Position: Capture Photo Mode

Rotor nut tightens in the opposite direction of arrow shown on top.
After powering on the transmitter and drone, rapidly flip the L1 switch from the Up to the Down position at least 5 times until the 4 LED indicators underneath the drone starts slowly flashing indicating compass calibration mode initiating.

Holding the drone horizontally, rotate the drone clockwise 360 degrees on its center axis 4 times or more until the 4 LED indicators beneath the arms of the drone stops flashing, indicating completion of the compass calibration.

If the drone does not hover in place and moves or spins by itself while hovering, adjusting the trim levels is necessary. Refer to the full Instruction Manual for how to unlock trim buttons and adjusting the drones trim levels.

**Drone Status Indicator**
- The drone has three different LED light colors that simultaneously light up in different combinations to indicate different modes before take off and during flight.
  
<table>
<thead>
<tr>
<th>Mode Description</th>
<th>LED Color Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPS Initialization Completed</td>
<td>Solid Orange + Solid Green + Solid Blue</td>
</tr>
<tr>
<td>GPS Stabilized Smooth Mode Available</td>
<td>Flashing Orange + Soli d Green</td>
</tr>
<tr>
<td>Low Battery Level Alert, Landing is recommended</td>
<td>Solid Orange + Slow Flashing Green</td>
</tr>
<tr>
<td>Only Normal Stabilization Mode Available</td>
<td>Solid Orange + Fast Flashing Green</td>
</tr>
<tr>
<td>Compass Calibration Mode has been initiated</td>
<td>Slow Flashing Orange + Slow Flashing Green</td>
</tr>
</tbody>
</table>

**Warning**
- Fast Flashing Orange + Fast Flashing Green = Take Off Prohibited

**Preflight Checklist**
- Ensure the Live Feed Screen and drone battery pack are fully charged. Use fresh batteries for transmitter.
- Set each switch on the transmitter to the correct starting positions (L1 & L2 to Middle Position).
- Check that all rotors are installed correctly and the rotor nuts are secure, tighten with rotor wrench.
- Insert a memory card into the camera correctly.
- Check gimbal and camera functions after powering on but prior to taking off.
- Verify that all the motors work normally after powering on.
- Check that the Live Feed Screen shows camera feed and all flight data is accurate.

**Calibrating the Drones Compass**
- Make sure to calibrate the drones compass when you fly for the first time or at a new location.
- After powering on the transmitter and drone, rapidly flip the L1 switch from the Up to the Down position at least 5 times until the 4 LED indicators underneath the drone starts slowly flashing indicating compass calibration mode initiating.
- Holding the drone horizontally, rotate the drone clockwise 360 degrees on its center axis 4 times or more until the 4 LED indicators beneath the arms of the drone stops flashing, indicating completion of the compass calibration.
- If the drone does not hover in place and moves or spins by itself while hovering, adjusting the trim levels is necessary. Refer to the full Instruction Manual for how to unlock trim buttons and adjusting the drones trim levels.
Take Off (GPS Signal equal to or greater than 5)

- Place the drone on a flat surface in an open area with the drones battery LED indicators facing Toward operator (Figure 1). Avoid people, obstacles, trees, high voltage lines and electromagnetic interference while flying.

- To adjust the live feed screen channel, power on the Live Feed Screen and press the channel selector until a clear image is displayed. If the video feed has interference change the drones channel by pressing the channel selection button behind camera gimbal first then the Live Feed Screens channel.

- Wait for 1 minute or more when flying in a new area until the blue LED indicator stops flashing (Figure 2).

- Pulling both control sticks to the bottom inside or bottom outside corners simultaneously to start the motors (Figure 3 or Figure 4). Release the control sticks to the center positions once the motors start.

- (Figure 5) Use the left stick (Mode 1) to control the throttle of drone to ascend and start flying (Slowly push up on the left stick).

- When the drone is hovering, ensure that the battery level indicator is always facing toward the Operator.

Transmitter Operations

- By default, the transmitter is set to Mode 1 so the left stick controls the throttle.

- See the Basic Flight Operations below: (Figure 1), (Figure 2), (Figure 3), (Figure 4).

Caution: The drone cannot be controlled by the operator once Return To Home Mode has been activated. Ensure that no obstacles are in the way of the return flight path. To regain control, toggle L1 switch to the Middle Position to resume standard flying mode.
Flight Modes

(1) Standard Ready To Fly Mode (L1 to Middle Position, L2 to Middle Position)
There are two modes based on signal strength:
• Normal Stabilized Mode (GPS signal is less than 5): The drone will keep its altitude when hovering.
• Stabilized Smooth GPS Mode (GPS signal is greater than or equal to 5): Drone will keep position and altitude when hovering.

(2) Easy Mode (L1 to Middle Position, L2 to Down Position)
Toggle L2 to the Down Position to activate Easy Mode when you cannot make out the front of the drone. During this mode the directional controls simplify so that pushing up on the left directional stick will move the drone away from you while pushing down on the stick will move the drone towards you.

(3) Aerial Photography Mode (L1 to Up Position, L2 to Middle Position)
Toggle L1 to the Up Position to activate Aerial Photography Mode. The drone’s maximum speed is set to 2.75 mph for more stable photos and videos.

(4) POI Mode (Point of Interest) (L1 to Middle Position, L2 to Up Position)
Toggle L2 to the Up Position while hovering over the area you want to focus on to start Point of Interest Mode. The drone will begin to hover around its origin point at a speed of about 6 mph facing the point of interest at all times. Use the right directional stick to increase or decrease the radius of orbit.

(5) Return To Home Mode (L1 to Down Position, L2 to Middle Position)
Toggle L1 to the Down Position to activate Return to Home Mode, the drone will return to the take off point automatically and land as long as the GPS signal is greater than 5. The drone will maintain its current height when returning home if the drone’s height is higher than 65 feet. If the drone’s height is lower than 65 feet it will ascend to 65 feet, return home and land.

(6) Low Battery Level Protection Mode
When the drones battery level drops below 10.8V, the drone will enter Low Battery Level Protection Mode. The drone will automatically turn off its motors and land at its current location after 60 seconds.

(7) Failsafe Mode (Signal Lost) (If the GPS signal is greater than 5)
When the drone loses signal from the transmitter due to distance or signal interference the drone will enter Failsafe Mode. The drone will automatically return to its take off point.

Landing the Drone
• Slowly push the Left Throttle Stick (Mode 1) down to make the drone descend (Figure 1).
• When the drone is touching the ground, push the Left Throttle Stick (Mode 1) down to the lowest position and hold for 10 seconds or more until the drones motors turn off (Figure 2).
• Press the two triangular buttons on the drones battery simultaneously for 3 seconds or more until the battery indicator turns off, remove the battery from the drone.
• Press the Live Feed Screen power button for 3 seconds or more until the display turns off.
• Power off the transmitter.

Notice: Make sure the transmitter power is turned off after the drone motors are turned off.

Notice: When the drone topples or falls, do not panic. The operator must push the left throttle stick (Mode 2) down for 10 seconds or more until the motors turn off.
Drone Battery Notes

1. When storing the drone, remove the battery pack and store the battery pack in an area out of reach from children.

2. Do not dispose the battery pack into a fire or store in any high temperature environments.

3. Only charge the drones battery using the supplied smart balance charger. Never charge the battery unattended. Check the battery for any abnormalities before charging, do not charge if abnormal in size, shape, or temperature.

4. Please identify the positive and negative contact points on the drone battery, do not allow them to come into contact with anything conductive.

5. Do not drop or strike the drone battery pack. Do not use a swollen, leaky or damaged battery pack.

6. If a battery pack leak is found, do not make contact with skin or eyes. If contact occurs, immediately rinse with plenty of water and seek medical attention.

7. The battery charge may be affected when used in low or high temperature environments.

8. Please do not throw away battery, dispose of in accordance with local regulations when the battery is no longer in use. Simply discarding the battery could result in a fire hazard.

9. Only use the battery under the instruction of this manual, do not use for any other purpose.

Limitation of Liability

World Tech Toys accepts no liability for damage, injury or any legal responsibilities incurred directly or indirectly from the use of this drone.

Thank you for purchasing the Raptor Live Feed Camera Drone, please read the Instruction Manual fully to understand all the functions of this drone, this quick start guide is for reference only. If you have any questions, email or call World Tech Toys Customer Service.

World Tech Toys Customer Service
Website: www.worldtechtoys.com
Email: customerserv@worldtechtoys.com
Phone: (877) 498-8697
Monday - Friday / 9:00AM - 5:00PM / Pacific Time