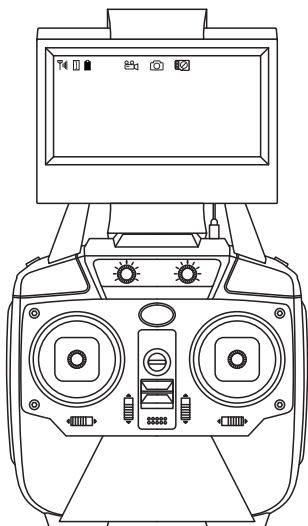
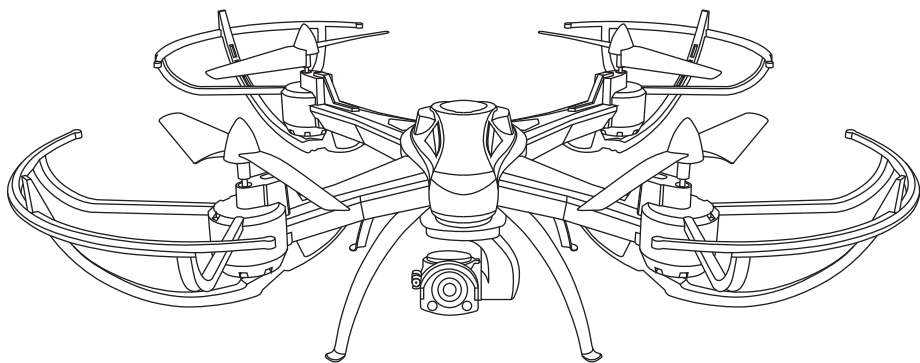


# SONIC SPY DRONE

2.4GHz 4.5CH LIVE FEED VIDEO CAMERA RC DRONE

## INSTRUCTION MANUAL



**WORLD  
TECH TOYS**

**14+**

FOR AGES 14 AND UP

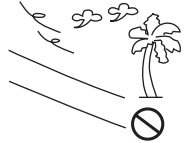
# INTRODUCTION

Thank you for purchasing this amazing World Tech Toys product. This drone is suitable for outdoor flight. Please carefully read the entire manual before operating this drone and keep it for reference in the future.

## PRECAUTIONS

### OUTDOOR FLIGHT PRECAUTIONS

This drone is designed for outdoor flight. Please make sure there are no obstacles in the flight path of the drone. Colliding into an obstacle while flying may damage the drone. Make sure there is little to no wind when flying outside. Only fly the drone when people are a safe distance away. Do not fly the drone within the vicinity of a crowd. The spinning rotors may cause injury if the drone comes in contact with someone.



### PREVENTING MOISTURE

Do not fly the drone outside when it is raining. Do not fly the drone close to open water. If the drone's comes in contact with water, it may short circuit the electronics and damage the drone.



### PROPER OPERATION

Do not modify or add anything to the drone. Modifying the drone may change its ability to fly properly causing it to crash. Do not disassemble the drone.



### TRANSMITTER AA BATTERY SAFETY

Make sure the AA batteries in the transmitter are installed with the correct polarity. Do not mix rechargeable AA batteries with non-rechargeable AA batteries. Do not dispose of drained AA batteries into a fire. Batteries may explode if disposed in a fire causing injury. Remove the AA batteries in the transmitter if you are not going to fly the drone for a long period of time. Store AA batteries in a cool dry place. Keep AA batteries away from heat.

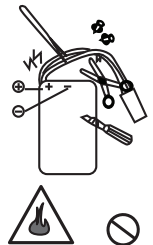


### DRONE BATTERY PACK SAFETY

The drone's battery pack is Lithium polymer. LiPo batteries pose higher operational risks compared to other battery packs so it's important to follow the instructions when using the battery. Manufacturer and dealer assume no liability for accidental damages caused by improper usage.

Do not use a charger other than the factory supplied charger to avoid causing a fire or damaging the battery pack. Do not try to disassemble, crush, burn or reverse polarity. Make sure there are no metallic materials close to the contacts of the battery. Do not charge the battery unsupervised.

Do not charge the battery overnight. Over charging the battery may damage it, causing it to not hold a charge. Stop using or charging the battery if you notice the battery temperature has increased more than usual.



### KEEP AWAY FROM HEAT

The drone is made out of various plastics and metal. Plastics are very susceptible to damage or deformation due to extreme heat and cold temperatures. Make sure not to store the drone near any source of heat such as an oven or heater. It is best to store the drone indoors in a climate controlled room temperature environment.



# GENERAL SPECIFICATIONS

**CONTENTS:** 1x Sonic Spy Drone 1x Wall Charger 1x 8GB Memory Card  
1x Transmitter with Live Feed Video Screen 1x Instruction Manual  
1x Screwdriver 1x Memory Card Reader 4x Spare Rotors

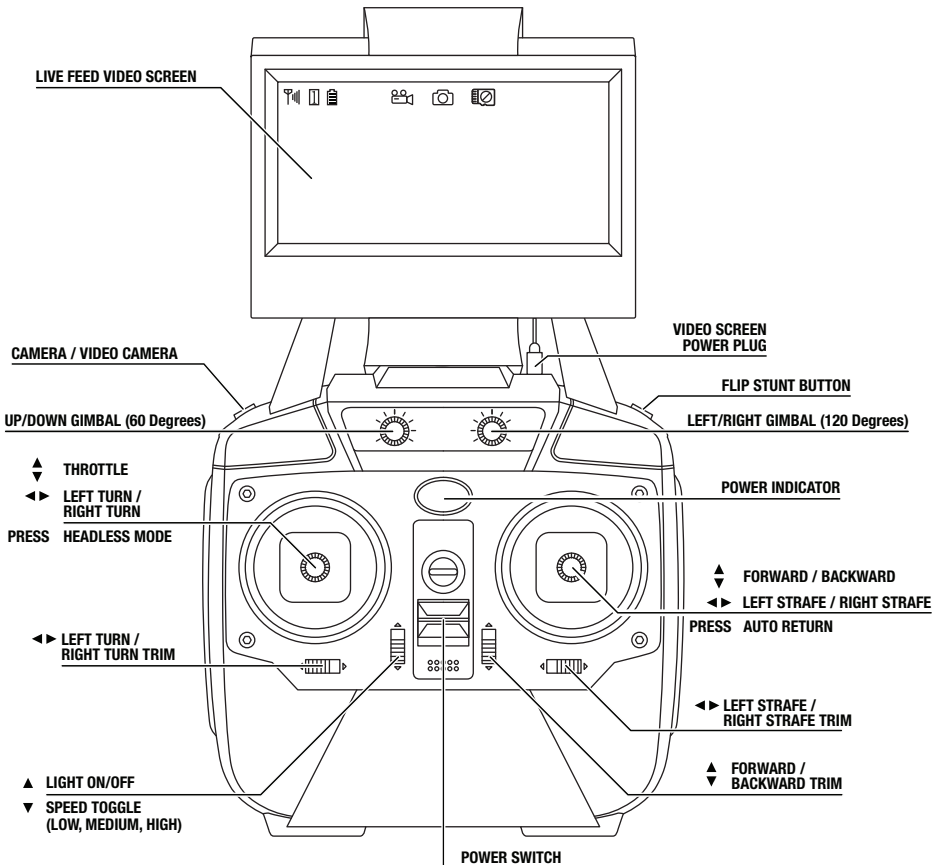
**Length:** 20.86 inches  
**Width:** 20.86 inches  
**Height:** 6.5 inches

**Drone Battery:**  
7.4V 1300mAh LiPo  
Rechargeable Battery

**Fuselage Weight:** 1.35 pounds  
**Flight Area:** 984 to 1640 feet  
**Flying Time:** 6 to 8 minutes  
**Charging Time:** Approximately 150 minutes

**RC Transmitter Battery:**  
4 x 1.5V AA Batteries  
(Not Included)

# TRANSMITTER DIAGRAM

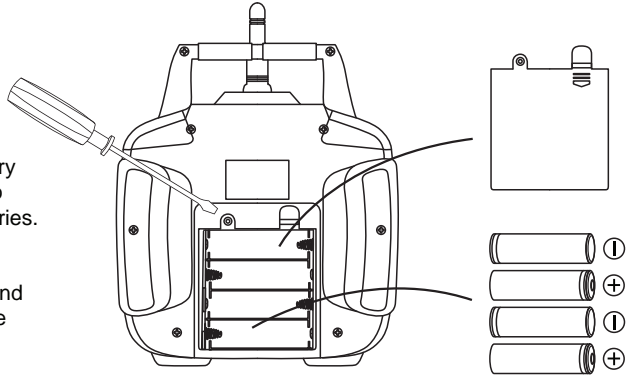


# INSTALLING TRANSMITTER BATTERIES

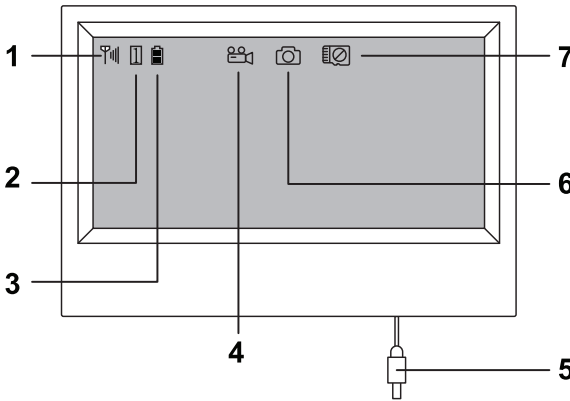
Remove the screw on battery cover and use the top tab to pull open. Install 4 AA Batteries.

Please note the polarity.

Replace the battery cover and screw once the batteries are properly installed.

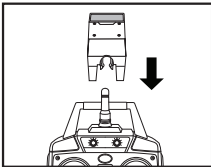


# LIVE FEED VIDEO SCREEN OVERVIEW

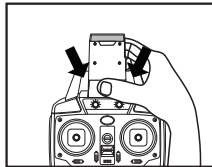


- 1.) Transmission signal strength.
- 2.) Transmitter frequency channel.
- 3.) Controller battery level.
- 4.) Icon will display red when recording.
- 5.) Live feed screen connector.
- 6.) Icon will display red when taking a photo.
- 7.) Icon will show when no memory card is inserted. Correctly inserted memory card will make icon disappear.

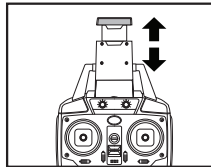
## Attaching Live Feed Video Screen and Cradle



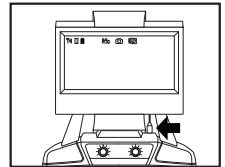
Line up antenna on transmitter with the screen cradle.



Press the cradle into the antenna as shown until it is clicked into place.

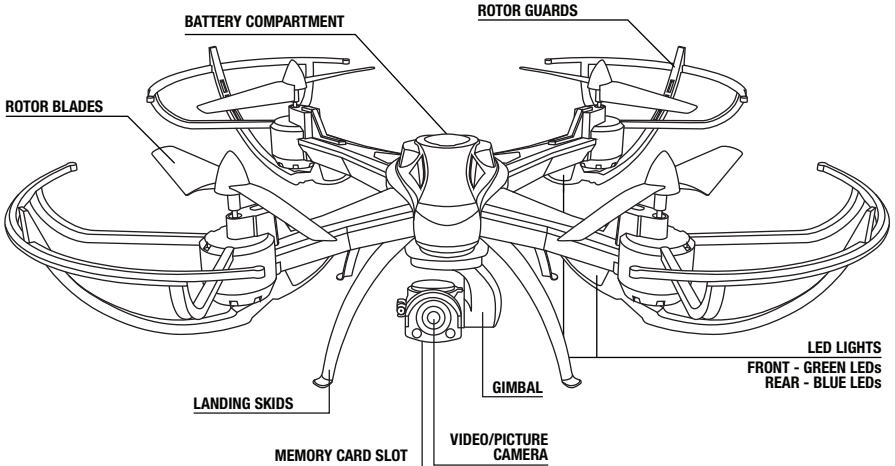


Pull up on cradles holder to open wide enough to secure live feed screen.



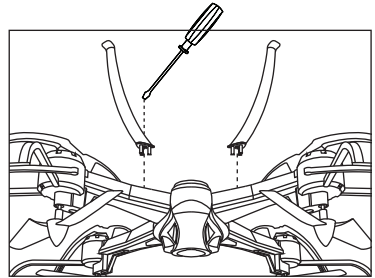
Insert the live feed screen, plug into the transmitter port on top of transmitter.

# DRONE DIAGRAM

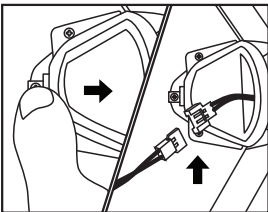


## LANDING SKIDS INSTALLATION

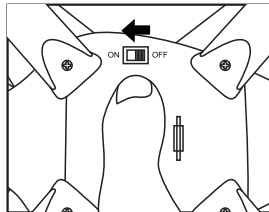
- 1.) Place drone upside down and take the landing skid placing it into the slot on frame. Make sure the screw hole on the landing skid lines up with the hole in the frame.
- 2.) Firmly screw in the landing skid to the frame with a screwdriver.
- 3.) Repeat steps 1 and 2 for the other landing skids.



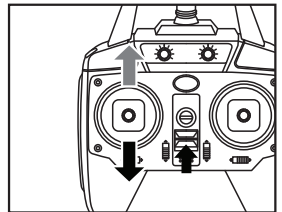
## BATTERY INSTALLATION & START UP



Open battery compartment on rear of drone. Insert battery and connect green plugs. Close compartment.

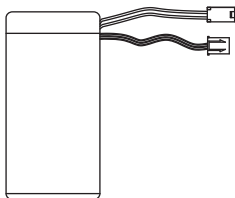


Turn drone power switch on located underneath drone. Place on flat, level surface clear for take off and landing.

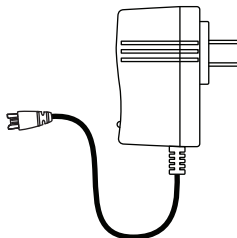


Turn transmitter on. Push up on throttle to hear a beep then push all the way down to hear a shorter beep. Drone is ready to fly.

# CHARGING THE DRONE BATTERY PACK



**7.4V 1300mAh LiPo  
Rechargeable Battery Pack**



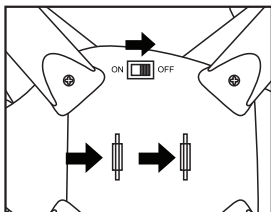
**Wall Charger**

The drone battery pack can be recharged with the included wall charger. The battery needs to be charged when the drones lights begin flashing or you notice a decrease in performance.

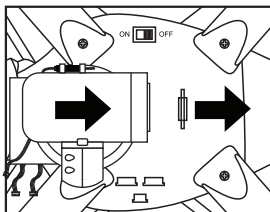
- 1.) Remove the battery pack from drone.
- 2.) Plug wall charger into standard outlet, red light will turn on.
- 3.) Connect the white battery pack cable to wall charger cable. LED will stay red while charging.
- 4.) After approximately 150 minutes the LED will turn green. Charging is complete.

\*Do not leave charger charging unattended or overnight. Unplug charger promptly after charging is complete to reduce risk of fire and/or injury.

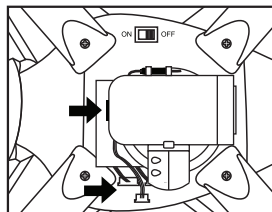
# ATTACHING CAMERA WITH GIMBAL



Flip drone over and make sure the power switch is turned off. Locate camera locking tabs and make note of install direction.



Line up the camera with gimbal and slide into locking tabs as shown until secured.



Plug camera cable into the port labeled, Cam Plug and gimbal cables into Servo Ports 1 and 2. Insert memory card into back of camera, clicking to secure.

## Taking Photos and Video:

Press the camera button once to take a single image. Press and hold the camera button to start recording video, to stop recording press and hold camera button again. The icons on live feed screen will turn red while image or video is being taken and recorded to the memory card.

## Gimbal Controls:

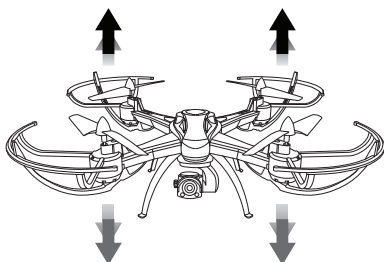
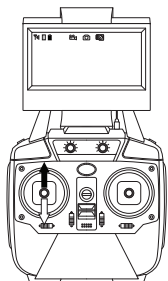
Turn knobs on transmitter to change position of camera before or during flight. The left knob moves the camera up and down 60 degrees. The right knob rotates the camera left and right 120 degrees. During power up gimbal will move back to its starting forward position.

# FLYING THE DRONE

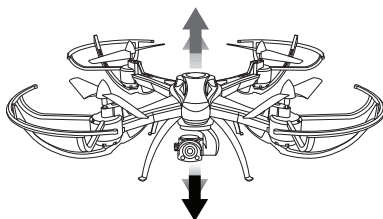
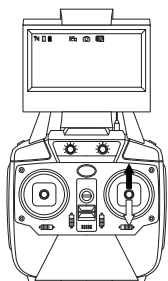
Before flying the drone for the first time please read the instructions carefully and make sure you fully understand how to control your drone.

## BASIC FLYING CONTROLS

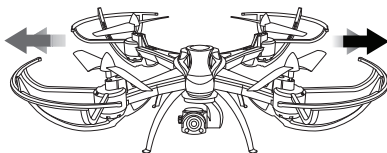
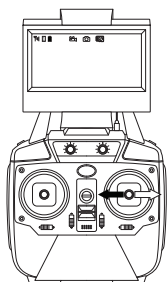
**Throttle**



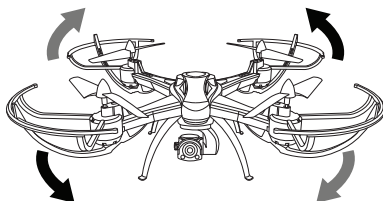
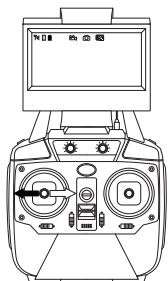
**Move Forward /  
Backward**



**Move Right /  
Move Left**



**Left Spin /  
Right Spin**

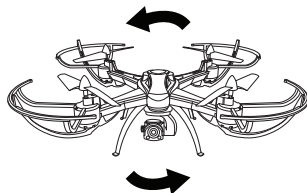
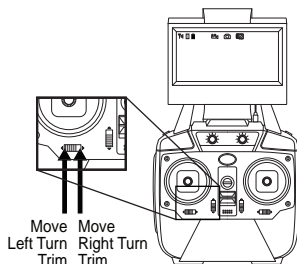


## ADJUSTING THE TRIM

When drone moves while hovering with no directional transmitter input, adjust the trim controls until hovering is stable.

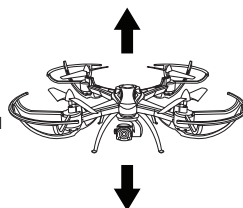
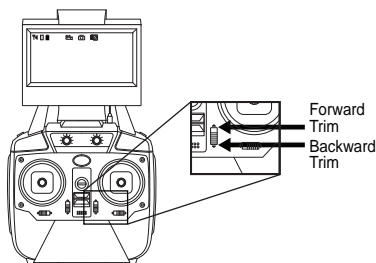
If the drone is spinning to the left, push the **RIGHT TURNING TRIM** button until the drone stops spinning.

If the drone is spinning to the right, push the **LEFT TURNING TRIM** button until the drone stops spinning.



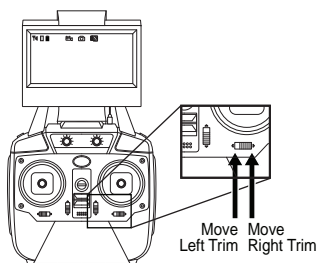
If the drone is moving forward, push the **BACKWARD TRIM** button until the drone stops moving forward.

If the drone is moving backward, push the **FORWARD TRIM** button until the drone stops moving backward.

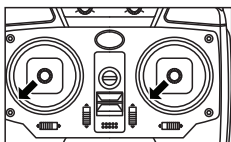


If the drone is moving left, push the **MOVE RIGHT TRIM** button until the drone stops moving left.

If the drone is moving right, push the **MOVE LEFT TRIM** button until the drone stops moving right.



## RESETTING DRONE



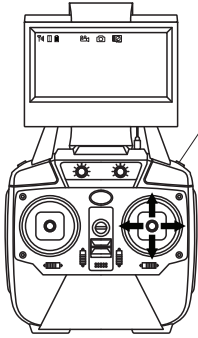
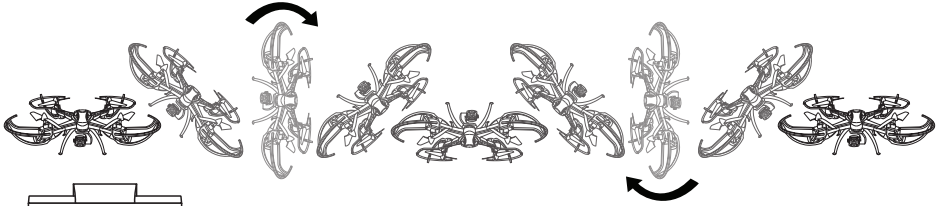
Resetting may be necessary if trim adjustment is not working. Turn on drone and place on a flat surface. Turn on transmitter and pair to drone. Pull both joysticks to the bottom left corner, lights will flash then return to normal when reset is complete.

## LAUNCH TOSS

After pairing with the transmitter you can launch your drone simply by tossing it in the air and pushing the throttle joystick straight up. The 6-Axis Gyroscope technology allows the drone to automatically stabilize, level itself out and hover smoothly while airborne.



## FLIP STUNT MODE

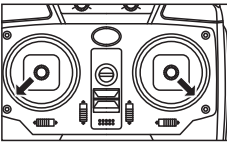


Have the drone hover at least 10 feet off the ground. Press the Flip Stunt Button and push the right joystick in the direction you want the drone to perform a single flip.

### IMPORTANT:

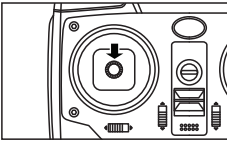
Make sure the drone is hovering at least 10 feet off the ground before performing the flip stunt. The flip stunt will cause the drone to drop approximately 6 feet. If you perform the flip stunt while being less than 10 feet off the ground, the drone could crash.

## ALTITUDE LOCK



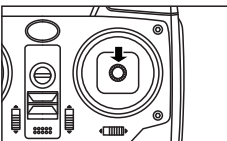
Pull the left joystick to the bottom left corner and the right joystick to the bottom right corner to activate Altitude Lock. This makes the drone keep its altitude without your input. Adjust throttle up or down with the left joystick returning to the center to change current altitude. Joystick will spring back to center after adjusting.

## HEADLESS MODE



When flying you must know which direction your drone is facing to control properly. Activate Headless Mode by pressing/clicking in on the left joystick. The drone's directional input on the right joystick will now be mapped to your position so Up/Forward, Right/Right, Left/Left, and Down/Backward. Normal function is returned by pressing/clicking in on the left joystick again.

## AUTO RETURN



When you want to return the drone to you quickly and easily use the Auto Return function. Fly the drone so that it is in front of you and press/click in on the right joystick to start the function. While returning you still control the throttle to safely land your drone.

# POST FLIGHT

After you are done flying the Drone make sure the battery pack on the drone is disconnected and the transmitter power is turned off. If you are not going to use the drone for a long period of time, please remove the AA batteries to prevent the batteries from draining or leaking.

## AUTOMATIC SHUTDOWN OVERRIDE FUNCTIONS

For safety precautions, the drone will automatically shut down when the following situations occur:

1. When the drone's battery is running low.
2. When one or more of the drone's propellers gets into a collision impact or any form of entanglement.

## TROUBLESHOOTING

| PROBLEM   | CAUSE  | SOLUTION   |
|---|--|--|
| <b>Drone is unresponsive. The Transmitter light keeps flashing.</b> | Transmitter is not syncing with drone.           | Repeat the power up process.   |
| <b>Drone is unresponsive.</b>                                       | Transmitter and or drone is not powered ON.      | Turn both transmitter and drone ON.  |
|   | Transmitter batteries are installed incorrectly. | Install the batteries with the correct polarity.   |
|   | Transmitter batteries are drained.               | Install fresh batteries to the transmitter.  |
| <b>Transmitter light is ON. Drone is unresponsive.</b>              | Drone's battery pack is drained.                 | Charge the drone's battery pack.   |
| <b>Drone's rotors spins but doesn't take off.</b>                   | Rotor blades are damaged.                        | Replace the damaged rotor blades.  |
|   | Drone's battery pack is drained.                 | Charge the drone's battery pack.   |
|   | Drone is not on a flat surface.                  | Place the drone on a flat surface before attempting to take off.   |
| <b>Drone is shaking when flying.</b>                                | Rotor blades are damaged.                        | Replace the damaged rotor blades.  |
| <b>Drone moves while hovering without transmitter input.</b>        | Trim needs to be adjusted.                       | Adjust the trim.   |
| <b>Drone still moves forward after adjusting the trim.</b>          | Gyroscope midpoint is off.                       | Turn off both transmitter and drone. Go through power on process and make sure you place the drone on a flat surface before taking off. Reset drone. |