US Patents 10561956B2 & USD853939S1 & pending US & international patents

### Main Features

- · Easy to Fly 6-Axis Gyroscopic Stabilization
- · Easy to see at distance
- · Bright LED lights for extra visibility in day and night
- Capable of 360° flips
- Total Aircraft Weight under 1 oz (23g)
- 3 speed control: slow/beginner, medium, fast/ext

### Package Contents



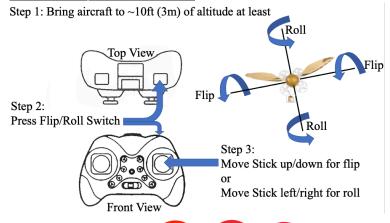
Flight Kit & Spares:

Screwdriver, USB Battery Charger

- 2 Spare Left hand Propellers

# 2 Spare Right Hand Propellers

### 3-D Flips & Rolls













150m. b Lithium

Polymer Battery

### General Notes

- · Read all instructions before using.
- · Keep dry at all times.
- Wear eye protection at all times.
- Keep away from children under 3.
- · Caution: small parts, choking hazard.
- · Do not swallow or put in mouth, choking hazard. • Not for children under 14 years of age or outdoor flight.
- Operate only in clear indoor areas away from people, pets or objects.
- This drone is NOT equipped with obstacle avoidance.
- Do not fly into people, animals, objects or vehicles.
- Keep aircraft away from all airports and other aircraft when operating.
- Keep aircraft away from all ground vehicles when operating.
- Store, use and ship the aircraft 50 90°F (10 32C).
- This device may expose you to chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to: 222.P65Warnings.ca.gov/product
- This device complies with Part 15 of FCC rules which prescribe that operation is subject to the following two conditions:
  - 1.) This device may not cause harmful interference;
  - 2.) This device must accept interference received including interference that may cause undesired operation.

### Installing Gransmitter Batteries





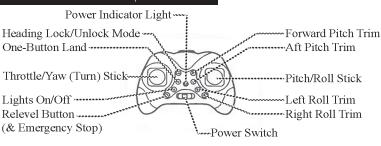


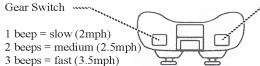
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EST. 1092

Remove the battery cover on the back of the transmitter by unscrewing the screw at the upper right of the cover (if in) and pulling the plastic tab on the left side downwards. Place three alkaline AAA batteries in the compartment in accordance with the polarities indicated (batteries to be purchased separately). Remove batteries from transmitter if unused for more than 1 month.

### Gransmitter Controls





Flip & Roll Switch press before pitch or roll command

### Flying Functions

#### Preflight:

- i. Install AAA batteries in transmitter
- ii. Install lithium polymer (LiPo) battery in aircraft, observing the polarity of the connector.
- iii. Turn switch on transmitter from "off" to "on" (The transmitter will beep.)

#### **Frequency Matching:**

- i. Push the throttle to the highest position
- ii. Then push the throttle to the lowest position (The transmitter will beep indicating "ready.")

#### Leveling and Releveling:

- i. Place on level surface during frequency matching
- ii. If needed, push the Relevel button

(The aircraft lights will flutter, then stop when ready for flight.)









### Aircraft Control Guide

#### Ascending/Descending Control

Push the Throttle/Yaw stick up or down to ascend or descend.





#### Left/Right Turn (Yaw) Control

Push the Throttle/Yaw stick left or right to turn left or right





#### Forward/Aftward Pitch Control

Push the Pitch/Roll stick forward or back to pitch forward or back.





#### Left/Right Roll Control

Push the Pitch/Roll stick left or right to roll left or right.





#### Forward/Aftward Pitch Trim Control

Press the Forward or Aftward trim buttons to trim the aircraft in pitch.





#### Left/Right Roll Trim Control

Press the Left or Right roll trim buttons to trim the aircraft in roll.





### General (Daintenance & Repair

- 1. Clean the aircraft regularly: dampen a soft, cotton cloth with window cleaner, then wipe off dust, dirt and debris. Be especially gentle with the wi as they are fragile. If fibers (thread, pet fur, human hair etc.) get around the propellers, remove them as they can adversely affect propeller speed.
- 2. Do not expose the aircraft to direct sunlight and/or leat. not fi utdoors or indoors in heat exceeding 90°F (32C).
- 3. Do not expose the aircraft to water or fly in inclement weather, rain, fog, drizzle or snow as the components may be shorted out.
- 4. Check the battery and power plug assembly regularly. In case of any damage, stop immediately using the product until damaged components are replaced.

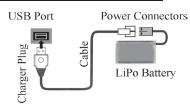
### General Safety Precautions

- 1. Keep small parts away from children and pets at all times as they might be swallowed or ingested.
- 2. Use slow, deliberate movements when learning to fly, especially with the throttle to prevent rapid movements and/or crashes.
- 3. After each flight, turn off transmitter before powering down aircraft.
- 4. Only fly the aircraft at least 6ft (2m) away from people and objects to avoid collisions, paying special attention to the head, face and body.
- 5. Operation by children allowed only under adult supervision.
- 6. Strictly follow battery use and charging protocols listed herein.
- 7. Remove batteries from aircraft and transmitter when not in use and safely store or dispose of batteries.

### Battery Charging, Mandling & Safety

#### Charging the LiPo Battery:

Connect one end of the USB cable to the battery charging port and the other end to the USB power port. The indicator light is off when charging and on when fully charged. A moderate charge can be reached in 45 min. Time to full charge is roughly 90 min.



The aircraft uses a 150mAh lithium-polymer (LiPo) battery. If handled carefully, this battery will last many dozens to hundreds of flights. If mishandled, it will rapidly lose its ability to store and deliver power.

- Use only 150-220 mAh/3.7V LiPo batteries.
- Let LiPo battery rest for 5 min. before connecting to charger after any flight.
- If completely discharged from flight, let LiPo rest 45 min. before recharging.
- Disconnect charger if LiPo battery is hot to the touch or puffed up.
- Never charge batteries overnight or when unattended.
- Keep LiPo battery cool and dry.
- If a LiPo battery feels warm to the touch, place in a safe, cool area.
- At least two LiPo batteries are recommended for regular flying so as avoid over use of a single battery.
- Store the battery in a dry environment between 50 90°F (10 32C) far away from any flammable materials.
- Pay special attention to heat-soaked vehicles. Leaving the battery in the sun, a heat-soaked vehicle or in a hot attic can damage the battery.
- Never store battery connected to anything including and especially a charger.
- Discharge the battery for 2 min. (to 1/2 charge state) by flying the aircraft for 2 min. before the battery is to sit unused for more than 10 days.
- Isolate the LiPo battery from other batteries and from all flammable materials during charging and storage.
- If LiPo battery is physically damaged, safely dispose of the battery and purchase a new battery replacement.
- Properly and safely dispose the overheated and/or damaged battery per regulatory guidelines. Never burn or mechanically destroy LiPo batteries.
- Use only the LiPo chargers that are supplied with the aircraft. Do not use unapprotes or third party chargers as they may damage the battery.
- Uncop folled, or-out-of battery tolerance recharging is dangerous and may cause a lettery fire or harmful explosion. Battery voltages should be between 3, and 4.1V, no more, no less.

### Common Problems & Solutions

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### Pro lems ircraft Fails

## to ake off.

- Causes · Battery discharged
- Propellers rotate too slowly or fail to rotate
- Solutions · Charge or change batteries
- Push throttle up
- · Clear fibers from around propeller shafts

### Thrust in wrong direction

- Propellers installed in wrong positions
- · Remove and reinstall propellers properly

#### Motor does not work

- · Battery discharged
  - Fibers wrapped around motor shaft or prop or dirty
- Charge or change batteries Clear/clean propeller and/
- Transmitter fails to connect to aircraft
- or propeller shaft Reconnect to aircraft (turn both off, then on, & throttle top-to-bottom)
- Motor is damaged or motor wires broken
- Replace motor and/or resolder broken wires

#### Aircraft is out of control

- · Aircraft is flying beyond effective transmitter distance distance (about 200 ft in a clean environment
- · Move to within control
- Throttle stick is not pushed to the lowest position for completion of frequency
- (60m) or operate with less interference Push throttle stick to the lowest position during

frequency matching

- matching.
- Propeller(s) damaged
- Replace propeller(s)

### moves to one direction when

not commanded

Aircraft shakes

violently or flies

towards one side

- Aircraft constantly Aircraft is out of trim
  - · Propeller(s) damaged
  - Motor is damaged
  - · Motor is fouled
  - · Not calibrated level in wings-level position
- Trim the aircraft by using trim buttons
- Replace propeller(s)
- Replace motor
- Clean motor & shaft
- · Recalibrate aircraft wings level