

QUADRONE CELL

Instruction Manual



Introduction

- Thank you for choosing Quadrone! This is a four-axis aircraft that can fly outdoors, in order to make it easier to control the aircraft. Please carefully read this manual before operating your Quadrone. Please keep this manual for future reference.
- Before your first flight, please take the time to carefully read this manual containing important flight information which will help your first flight go more smoothly.

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Notice

- All instructions, warranties and other collateral documents are subject to change at the sole discretion of our company.

Warnings

- Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property or cause serious injury. This is a sophisticated hobby product. It must be operated with caution and common sense, and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or property. This product is not intended for use by children without direct adult supervision. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in this manual, prior to assembly, set up or use, in order to operate correctly and avoid damage or serious injury.

Additional Warnings and Precautions

1. Age Recommendation: Not for children under 14 years of age. This is not a toy.
2. Always operate in open spaces away from obstacles, people, and hazards.
3. Always follow directions and warnings for this and any optional equipment carefully. (chargers, rechargeable battery packs, etc)
4. Always keep small parts and electrical parts out of the reach of children.
5. Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture can cause damage to electronics.
6. Never place any portion of the model in your mouth as it could cause serious injury or even death.
7. Never operate your model with low batteries.

Safety Notes

- If this is your first time flying a quadcopter read the manual carefully. Seek the help of an experienced pilot to help you fly. These safety instructions are intended not only for the protection of your Quadrone but also to protect your own safety. Improper operation can cause injury or property damage.
- This product is suitable for indoor and outdoor use. Please make sure you choose a flight area with no obstacles and maintain a safe distance from people and pets. Do not operate near power lines.

- RC models are composed of many precise electrical components. It is important to keep the model and associated equipment away from moisture and other contaminants. The introduction of exposure to water or moisture in any form can cause the model to malfunction or crash. Do not operate or expose to rain or moisture.
- To avoid a potential fire hazard from batteries, do not short, reverse polarity, or puncture batteries. Battery charging should be done under adult supervision at all times, at a location out of reach of children. Do not mix Ni-Cad and Alkaline batteries.
- Make sure the batteries are installed correctly to ensure correct polarity. If you do not plan to use your Quadrone for an extended period of time, remove the batteries from the controller to avoid battery leakage which may damage the controller. Please dispose depleted batteries according to local laws and ordinances.
- Li-Polymer batteries have higher operational risks compared to other batteries. It is imperative to follow proper operational guidelines. The manufacturer and dealer assume no liability for accidental damages caused by improper usage. Do not use any other charger other than the supplied charger included in this packaging in order to avoid potential fire or explosion. Do not crush, disassemble, burn, or reverse polarity.
- RC models are made from various forms of plastic very susceptible to damage or deformation due to extreme heat and cold temperatures. Make sure not to store the model near any heat source or adverse temperatures.

Included



Quadrone Cell x1



Remote Controller x1



Screwdriver x1

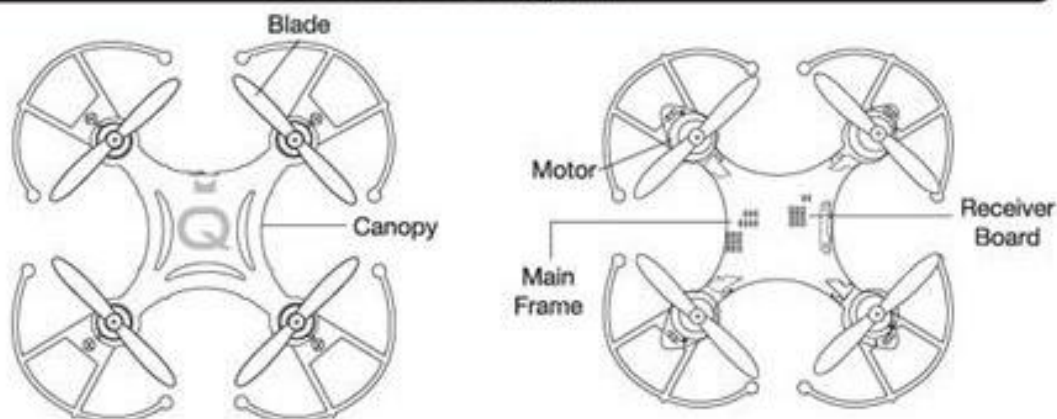


USB Charger x1

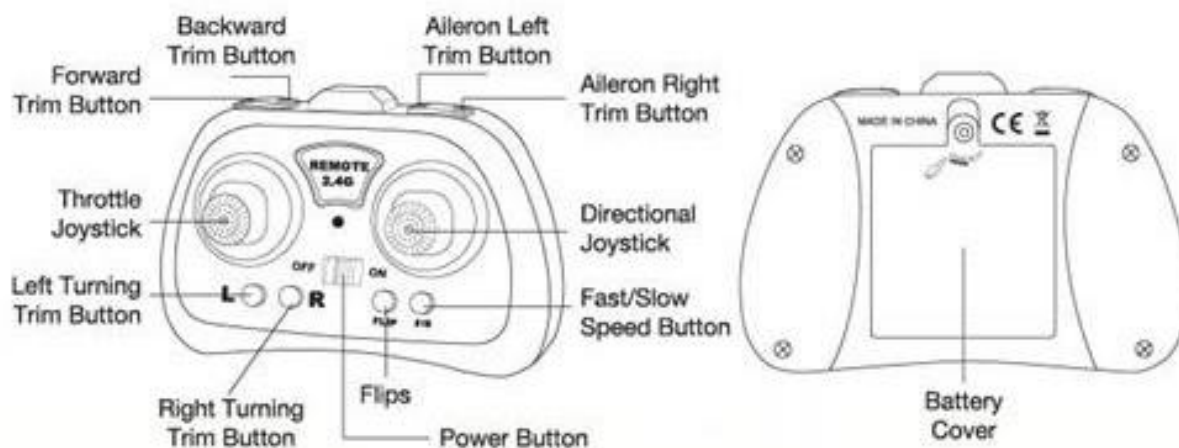


Extra Blades x4

Quadrone Diagram

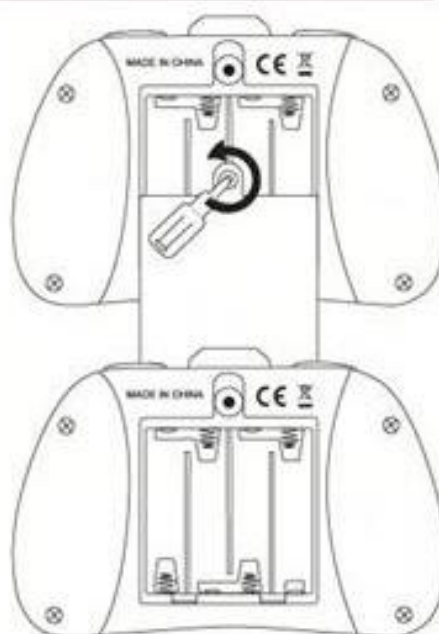


Remote Controller Diagram



Remote Controller Battery Installation

1. Use the included screw driver to open the battery cover. Rotate counter clockwise to loosen screw.
2. Insert 4 AAA batteries into the remote. Make sure the batteries are installed in the correct polarity as indicated in the controller. Do not mix old and new batteries or batteries with different chemistries.
3. Reattach battery cover.



Charging Your Drone

- To charge your Quadrone, plug the provided USB charger into a USB port. Connect the USB charger to the charging port of the Quadrone. The Quadrone is now charging. A red light will turn on on the USB charger indicating the charging process has completed. Always charge your Quadrone under adult supervision and out of the reach of children.

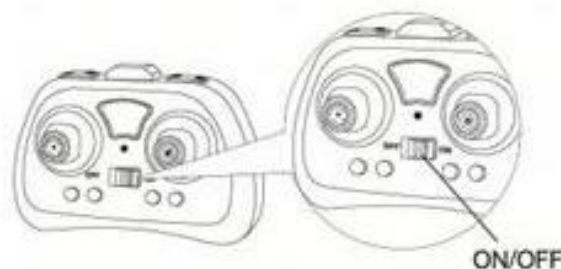
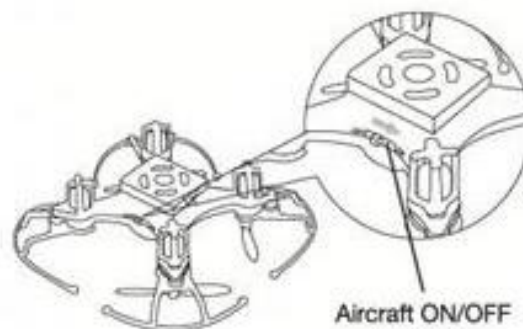


Battery and Charger Specifications

Battery Type	Battery Specification	Usage Duration	Charge Time
Li-Po Battery	3.7V 145 mAh	Quadrone Flight Time: Approx. 7 Minutes	Approx. 30 Minutes (Charging current approx. 0.35A)
Carbon-Zinc Battery (Non-Rechargeable)	1.5V (GP 15G R4P)	Remote Operation Time: 18 Hours	Non-Rechargeable

Syncing the Quad and Remote

- Turn on your Quadrone using switch on the bottom side. Place it on a flat surface. The red lights on the Quadrone will begin to flash. Do not move the Quadrone during the syncing process to ensure the gyroscope stays balanced.
- Lower the Throttle joystick of the remote to its lowest position. Slide the controller's power button to the on position. The Quadrone's red lights will stop flashing and stay on.
- Push the Throttle joystick to its highest position and the remote will beep. Now move it to its lowest position again and the remote will beep a second time. The Quadrone and remote controller have been synced together. You are now ready to fly.

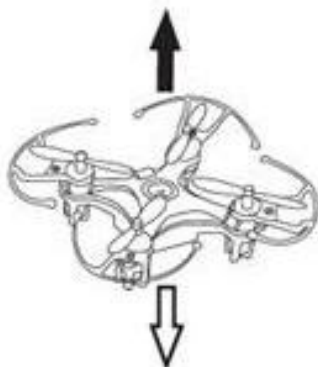


- If you are not going to use your Quadrone for an extended period of time, please take out the batteries in your remote controller. Potential battery leakage could occur and possibly damage the remote or create a fire hazard.

Flight Controls

- Before flying your Quadrone, it is highly recommended that you familiarize yourself completely with its controls. Read through the instruction manual completely before attempting your first flight.

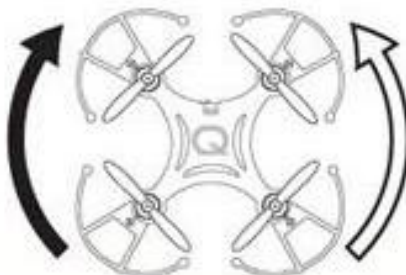
Elevation



Push up on the throttle joystick. The Quadrone will begin to ascend.

Pull down on the throttle joystick. The Quadrone will begin to descend.

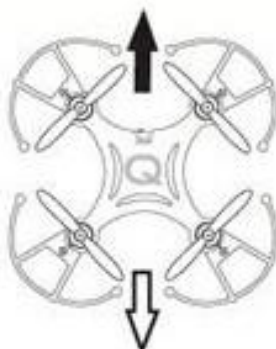
Turning



Push the throttle joystick to the right. The Quadrone will turn to right.

Push the throttle joystick to the left. The Quadrone will turn to left.

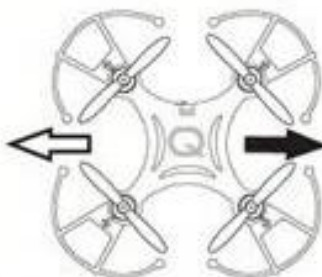
Forward/Backward



Push the directional joystick to forward. The Quadrone will fly forward.

Push the directional joystick to the left. The Quadrone will turn to left.

Aileron



Push the directional joystick to the right. The Quadrone will fly to the right.

Push the directional joystick to the left. The Quadrone will fly to left.

Practice Tips

- Use these recommended practice exercises to become a better Quadrone pilot:

Elevation: Raise the Quadrone using the throttle joystick. Gradually lower the Quadrone so it lands softly to the ground.

Direction: Move the Quadrone in a cross pattern using the directional joystick. Move forward, backward, left, right, and back to its original position.

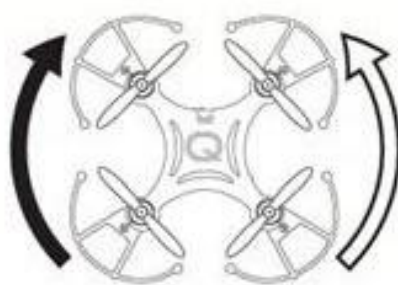
Turning: Turn the Quadrone in a throttle joystick. Turn left and right repeatedly, and back to its original position.

Flying: Once you have mastered the previous three exercises, draw a circle on the ground. Practice flying within the confines of the circle. Narrow the circle as your skills progress.

Trimming the Quad

- If your Quadrone is leaning to or favoring a side, you may need to use the trim feature to balance it out so it flies straight.

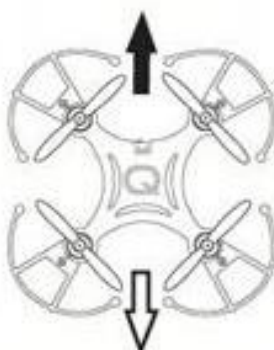
Turning



If the Quadrone turns to the right, press the L button until it straightens out.

If the Quadrone turns to the left, press the R button until it straightens out.

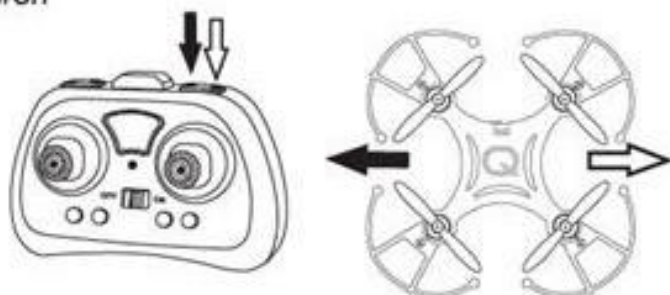
Forward/Backward



If the Quadrone leans forward, press the B button until it balances out.

If the Quadrone leans backward, press the F button until it balances out.

Aileron



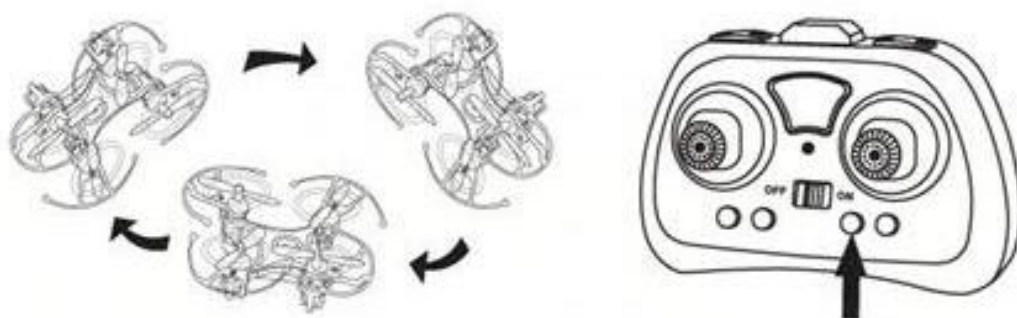
If the Quadrone leans to the right, press the L button until it straightens out.

If the Quadrone leans to the left, press the R button until it straightens out.

- * If the trim buttons do not correct the problem, you will have to recalibrate your drone. To do so, turn off the quad and remote. Turn the quad back on, then turn the remote on while holding the F/S button. The light on the remote will blink as well as the lights on the quad. Once the lights on the quad stop blinking for two seconds, recalibration is complete.

Flips and Rolls

- Your Quadrone can perform impressive flips and rolls in midair. In order to do this, press the flip button on your remote during flight. Move the directional joystick in any direction and the aircraft will perform a coinciding flip.



Speed Selection

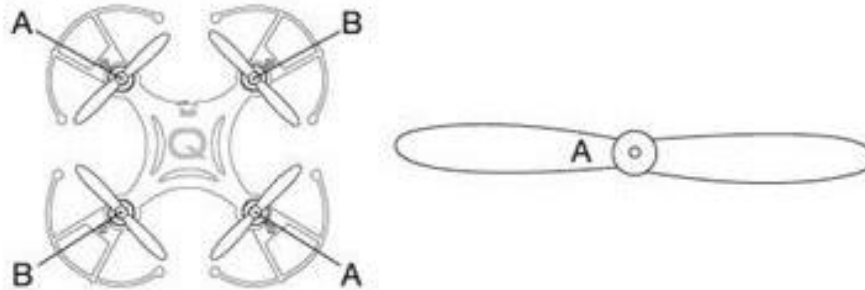
- Your Quadrone can fly at three speeds. To select a speed, press the F/S button on your remote. Your remote will beep each time you switch speeds.

Slow Speed: 1 Beep
Medium Speed: 2 Beeps
Fast Speed: 3 Beeps



Changing the Blades

- If a blade breaks or falls off your Quadrone during a crash, it will be up to you to repair it. Simply push one of the extra blades onto the exposed motor. It is important for the correct blade to be put on the correct motor or the drone will not fly correctly. A letter is marked on each blade to indicate which motor it should go on. See diagram below:



Troubleshooting

Problem	Cause	Solution
Drone's LED lights blink continuously for more than 4 seconds after quad is turned on. No response to controller.	Unable to sync to remote controller.	Repeat power sequence and re-sync. (See pg. 5)
No response after quad is turned on.	1. Remote batteries have been depleted. 2. Batteries are installed at incorrect polarity.	1. Replace batteries. 2. Reinstall batteries at correct polarity.
Motor does not respond to throttle.	Battery has been depleted.	Recharge quad battery.
Motor spins but doesn't take off.	1. Bent rotor blades. 2. Quad battery is depleted.	1. Replace damaged blade. 2. Recharge battery.
Quad is making a loud vibration noise.	Bent or damaged rotor blades.	Replace damaged blade.
Quad still wanders forward after trim adjustment.	Forward trim is too high.	1. Lower forward trim. 2. Recalibrate drone.
Cannot fly after crash.	1. Motor fell out. 2. Gear loosened.	1. Reinstall motor. 2. Tighten gear.

Safety Guidelines

- Follow community-based safety guidelines, as developed by organizations such as the Academy of Model Aeronautics (AMA).
- Fly no higher than 400 feet and remain below any surrounding obstacles when possible.
- Keep your drone in eyesight at all times, and use an observer to assist if needed.
- Remain well clear of and do not interfere with manned aircraft operations, and you must see and avoid other aircraft and obstacles at all times.
- Do not intentionally fly over unprotected persons or moving vehicles, and remain at least 25 feet away from individuals and vulnerable property.
- Contact the airport or control tower before flying within five miles of an airport.
- Do not fly in adverse weather conditions such as in high winds or reduced visibility.
- Do not fly under the influence of alcohol or drugs.
- Ensure the operating environment is safe and that the operator is competent and proficient in the operation of the drone.
- Do not fly near or over sensitive infrastructure or property such as power stations, water treatment facilities, correctional facilities, heavily traveled roadways, government facilities, etc.
- Check and follow all local laws and ordinances before flying over private property.
- Do not conduct surveillance or photograph persons in areas where there is an expectation of privacy without the individual's permission.

Battery Disposal Guidelines

WARNING!

To reduce the risk of fire or burns:

Do not disassemble, crush, puncture, or short external connectors contacts.

Use only with specified charger and player.

Do not dispose of in fire or water.

Do not expose to high temperature above 140° F (60° C).

Store between 32° F (0° C) and 140° F (60° C).

Keep away from children.

See operating instructions of this battery or product.



Li-ion Battery
Must Be Disposed
Of Properly

Batteries should be recycled or disposed of as per State and Local guidelines.

Limited 90-Day Warranty

DGL Group, Ltd. warrants to the original consumer that this product is free from any electrical or mechanical defects for a period of 90 DAYS from the date of purchase. If any such defect is discovered within the warranty period, DGL Group, Ltd. will repair or replace the unit free of charge upon receipt of the unit, shipped postage prepaid and insured to our warranty center. The warranty covers normal consumer use and does not cover damage that occurs in shipment or failure that results from alterations, accident, misuse, abuse, neglect, wear and tear, inadequate maintenance, commercial use or unreasonable use of the unit. Removal of any parts/components voids all warranties. This warranty does not cover cost of repairs made or attempted outside by third-party individuals and fitness, are hereby limited to 90 DAYS from the date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded. Some states do not allow limitations on the duration of implied warranties and do not allow exclusion of incidental or consequential damages, so the above limitations and exclusions in these instances may not apply.

REPAIR/REPLACE PRODUCT

If your product begins to malfunction or stop working, immediately call or email our warranty center at the phone/email listed below. If it is determined that a return is necessary, our warranty department will issue you an RMA number/form and an address to the nearest return center to ship the product to. **IMPORTANT NOTICE:** We will reject all returns that are not accompanied by an issued RMA form and number so make sure to contact our warranty center before attempting to return your product!

PREPARATION FOR SHIPPING YOUR PRODUCT

Please repack your product in a durable box, preferably in the original carton, and send it prepaid, and adequately insured. Include the RMA form that was issued by our warranty department along with your daytime telephone number and email address (if available) inside the shipping carton. If your warranty has expired, contact our warranty center for charged service. For further information please send all inquiries to support@dglusa.com

IMPORTANT NOTICE!

**DO NOT ATTEMPT TO SHIP YOUR PRODUCT BACK WITHOUT
FIRST CONTACTING OUR WARRANTY DEPARTMENT AT:**

DGL Group, Ltd.
WARRANTY REPLACEMENT DEPARTMENT
TEL: 888-987-3089
support@dglusa.com

Warning: 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.

NOTE: 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 radio 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.



FCC ID: 2AANZQDRCELL

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Other trademarks and trade names are those of their respective owners.



DGL TOYS,
195 Raritan Center Parkway, Edison, NJ 08837.

Specifications, colors and contents may vary from illustrations.
Conforms to safety requirements of ASTM, FCC, & CPSIA.

BATTERY WARNING:

- Do not mix alkaline, standard (carbon zinc), rechargeable (nickel hydride) batteries.
- Do not mix old and new batteries.
- Non-rechargeable batteries should not be recharged.
- Rechargeable batteries should be removed from the appliance before being charged.
- Rechargeable batteries should be charged under adult supervision only.
- Exhausted batteries should be removed.
- The supply terminals should not be short-circuited.
- Only batteries of the same or equivalent type are recommended to be used.
- Batteries should be inserted with the correct polarity.

WARNING:
CHOKING HAZARD-Small parts.
Not for children under 3 years.

Tested to comply with FCC standards.
FOR HOME OR OFFICE USE.
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.

Manufactured in
Shantou, Guangdong, China
Batch Ref: 161024DGL
Model Number: AW-QDR-CELL