LRP Gravit

Quadcopter **Instruction Manual** (Guard of space)



#220702 S-2UFO **Gravit Micro 2.0 2.4GHz Quadrocopter RTF**

Chenghai Shantou City Jiayuan Plastic Toys Co.,Ltd Gangkou Industrial Area, Chenghai District, Shantou City, **Guangdong Province, China**

Please read the instruction manual comprehensively before using. (Pease read it carefully, especially the NOTICE.)

1.THE MAIN TECHNICAL PARAMETERS OF REMOTE CONTROL FLYING SAUCER

ength of fuselage:220mm	Weight about:44g	Li-polymer Battery:3.7V260mAh	
overall height: 51mm	Main engine: Ø 7*4PCS	Charging time around 40 minutes	
iameter of the main otator: 64mm	The helicopter can have about 5-7 minutes of flight time		

2.CONTENT IN THE BOX

NAME	QTY	NAME	QTY	NAME	QTY
Drone (Quadcopter)	1PC	One set of main rotor	4PCS	Charging compartment	1PC
Remote controller	1PC	Instructions	1PC	USB charging wire	1PC

3.SAFELY PRECAUTIONS

- Please read through the manual's before using
- Please store small parts in a place well out of the reach of small children.
- Never leave the quadcopter unattended during battery charging.
- Never throw any batteries in a fire.
- Never fly the quadcopter near other people • Keep all body parts away trom the copter while the rotor blades are spinning.

4.FLYING PRECAUTIONS

- 1. Keep small parts out of the reach of children, to avoid choking hazard. 2. The quadcopter is powerful, when taking off, move the throttle stick forward gradually, to avoid it's
- 3. After flight, disconnect the Li-po battery from quadcopter first, then turn off the controller
- 4.Do not put the battery in high temperature to near heat source.
 5.Note, to avoid injury or damage, the quadcopter should not be flown nearer than 2 meters/7 feet from people or other obstacles.
- 6.Children should fly the quadcopter under adult supervision only. Always keep the quadcopter in
- 7. Always turn off the power of the controller and quadcopter when not in use.

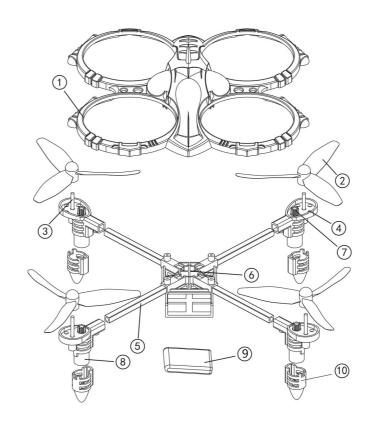
5.PREPARING TO FLY

- 1. Make sure that flight area is clear of people or other obstacles
- 2.Connect the battery to the quadcopter (please make sure you plug in with the right porality) the indicator light on the circuit board flashes rapidly at this time, place the guadcopter at a level position. When the flashing LED on the circuit board turn to stable RED light, it is ready to take off.
- 3. Turn on the controller, a beep will sound. Then push the left throttle up and down for once to sense
- 4. Push the throttle lever slowly forward, the quadcopter will take off.

6.MAINTENANCE

- 1. Clean the quadcopter with clean, dry soft cloth only
- 2. To avoid irreparable damage, keep the quadcopter dry and away from water. Do not fly in rainy
- 3. Check the quadcopter and accessories for damage. If damage is found, do not use the quadcopter

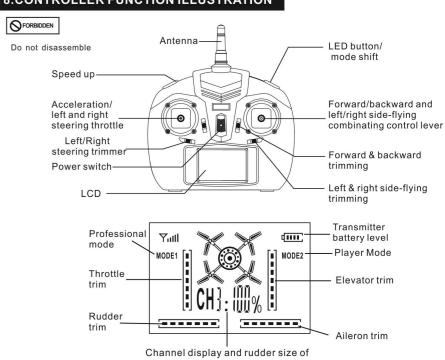
7. PARIS LIST



NO	Name	Quantity
1	Canopy	1
2	Blad	4
3	Rotation axis	4
4	Transmission gear	4
5	Carbon fiber tube	4
6	Frame	1
7	Motor blok	4
8	Motor	4
9	Battery	1
10	Motor cover	4

The contents of the packaging of materials, specifications or parts of this manual for information. The Company will not be liable for printing material transaction is responsible for and can not take the initiative to inform consumers, any updates or transactions, mainly in the Company's

8.CONTROLLER FUNCTION ILLUSTRATION



There are 4 levels speed (40%, 60%,80%,100%) for different level's players choice. 40% speed- slowest speed with slow movement in all direction, suitable for beginners to practice and get

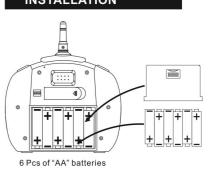
farmiliar with the quaducopter 60% speed-fast speed for faster movement than 40% speed. After practicing, please choose to play with faster

speed for more exciting control feeling. 80% speed-for faster movement, enjoying playing outdoor withstand wind to move as you wish.

100% speed- for fastest movement even if you move the right controlling stick bit, the quadcopter canmove pretty

Note: please practice more before youwant to play skillfully with 100% speed sideward control play.

9.TRANSMITTER BATTERY INSTALLATION

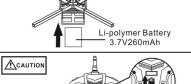


Load 1 or 2 PCS of batteries into the charging compartment, and then insert the USB charging wire into the charging port of the charging compartment. Then please connect with the USB power. Cable to any power supply such as laptop, computers etc.

10.CHARGING INSTRUCTION OF THE

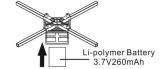
When finish charging, the red indicator will be OFF Warning: Only the original charger included in this product can be used for charging the battery.

11.CONNECTING THE SIGNAL



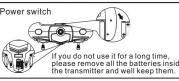
Place the quadcopter on the level position. Then push the battery inside the battery box as per picture indicating. Connecting the battery charging prot to the PCB cable port. At this time, the LED lights on the PCB will start flashing.

Make sure the throttle is to the lowest point before turning or the switch. After turning on the switch, it beep a sound. Ther push the left throttle up and down once and the signal between the controller and quadcopter can be connected.



stick to lowest

Please always make sure to remove the battery from the quadcopter after finishing the flight. Don't leave the battery in the quadcopter for long, or it may incur damage to batteries or fire hazards



ON/OFF switch of the transmitter, if you do not use it for a long time, please remove all the batteries inside the transmitter and well keep the If you do not remove all the batteries, the batteries may be over-discharged and damaged or even cause the danger of burning fire.

Push the throttle

quadcopter will turn to left, Push the

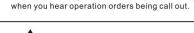
to left, Push the to the right, and the quadcopter will turn

12.FLIGHT ADJUSTMENT AND SETTING

PLEASE PRACTICE SIMULATION FLIGHT BEFORE ACTUAL FLYING

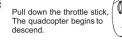
Before you are familiar with the flight vehicle, please don't set it fly, read the instruction carefully. Get familiar with all kinds of direction control and keep repeating until you can play it as you perform your

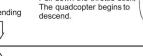
1. Place the flight vehicle in a clear open field and make sure the tail of quadcopter pointing to yourself. 2. Practice to operate the throttle stick(as below illustration) and repeat practicing "Throttle high/low", "Aileron left/right", "Rudder left/right", and "Elevator up/dowm". 3.The simulation flight practice is very important, please keep practicing until the fingers move naturally

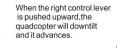




The quadcopter begins to







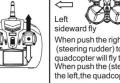
When the is pushed downward,the quadcopter will uptilt and it recedes.

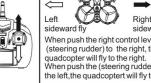


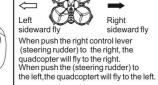












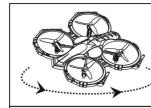


NOTICE

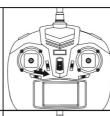
Attention:

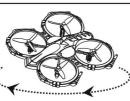
Push the throttle level slowly; please press the trimming buttons when the quadcopter spins or leans to different directions in the air.

When the quadcopter ascends to 30cm high, it will suffer the "ground effect" and tis performance will be affected a little bit



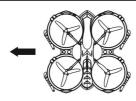
When the quadcopter spins towards to left, please continuously press the trimming button (right-turn trimming) till it stops spinning.





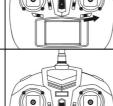
When the quadcopter spins towards to right, please continuously press the trimming button (left-turn trimming) till it stops spinning.

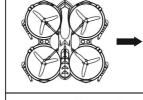




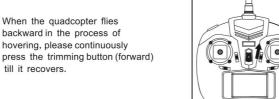
When the quadcopter flies sideways (towards the left) in the process of hovering, please continuously press flv) till it recovers.

When the quadcopter flies sideways





(towards the right) in the process of hovering, please continuously sideways fly) till it recovers.





When the quadcopter flies forward in the process of hovering, please continuously press the trimming button (backward) till it

till it recovers.

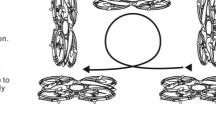


Stable, flexible, flight routes, Drift, 3D tp roll easily

How to do the flip & roll function (looping function)

1.Make sure your quadcopter does not fly too high, too low or too near to any obstacles. 2.Press the speed button on the left top of the controller to

100% speed, the you can get ready to do the flip and roll function. 3. Move the right control stick towards any direction and the quadcopter performs a 360° looping (flip and roll) towards the corresponding direction. 4. If you want to go back to normal flying, you can either choose to change the speed to 40% again for normal flying; Or practice to get farmiliar with the response movement range of every slightly move of your right controlling stick while you play.

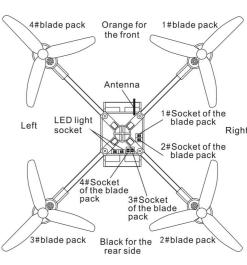


13.TROUBLE SHOOTING DURING FLIGHT

	Situation	Cause	Way to deal
1	Receiber staus LED blinks continuously formore than 4 seconds after flight vehicle battery inserted. No response to control input.	Unable to bind to transmitter.	Repeat the power up initializing process.
2	No response after battery is connected to flight vehicle.	1.Power to transmitter and receiver. 2.Check transmitter and receiver voltage. 3.Poor contact on battery terminals.	1.Turn on transmutter and ensure flight vehicle battery is inserted properly. 2.Use fully charged batteries. 3.Re-seat the battery and ensure good contact between battery contacts.
3	Motor does not respond to throttle stick, receiver LED flashes.	Flight vehicle battery depleted.	Fully charge the battery, or replace with a fully charged battery.
4	Main rotor continue to spin after landing	Throttle trim accidentally increased during flight.	Confirm throttle trim is in center or slightly below.
5	Main rotor spins but unable to takeoff.	Deformed main blades. Elight vehicle battery depleted	1.Replace main blades 2.Charge or replace with fully charged battery.
6	Strong vibration of flight vehicle	1.Deformed main blades	1.Replace main blades
7	Tail still off trim after tab adjustment, or inconsistent speed during left/right pirouette.	Danaged tail rotors Danaged tail drive motor	Replace main blades Replace the main motor
8	Flight vehicle still wonders forward after trim adjustment during hover.	1.Gyroscope midpoint not	The boot will lift fine-tune the normalized neutral point, reboot
9	Flight vehicle still wonders left/right after trim adjustment during hover.	1.Motor off 2.Cone loose	Replace the motor Installed tight cone

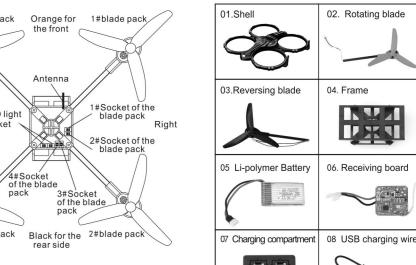
14.Res	et function (How to reset the Quadcopte	er to its original stable status)
Step1	Vall SCH1: MING	Turn on the quadcopter and the tansmitter, push the throttle up and down for once to begin connecting the signal. Press the Speed Button until it is Level 4 100% Speed.
Step2		Then push both left and right sticks to down left corners (7 o'clock)
Step3		The red LED on the PCB board will keep flashing. Now release both sticks back to the midled. The LED stop flashing. Now the Quadctoper recovers. It is ready for the next flying at the most stable and balanced status.

15.ADDITIONAL INSTRUCTION ON THE RECEIVING BOARD



As picture shown, the antenna direction of the circuit board is the FRONT direction. When assembling each blade, please make sure each blade can be inserted into the corresponding socket as per the corresponding number shown Only when you can insert them correctly can you

16.ACCESSORIES FIGURE



conduct normal flying smoothly.

09 Remote

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. Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
- 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.