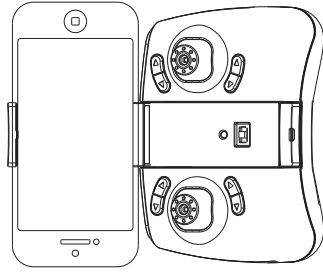
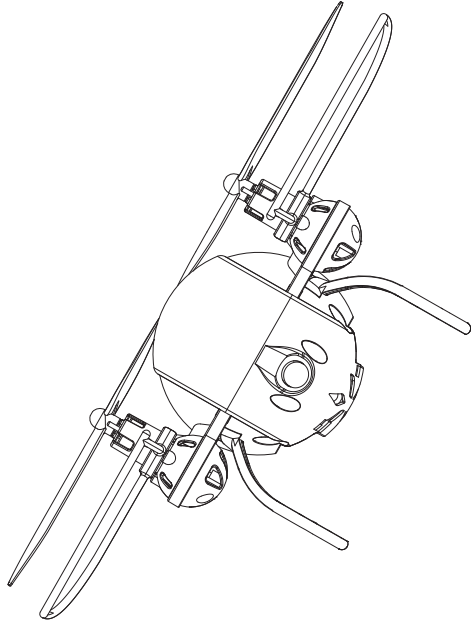


CVL-ES

WIFI REAL-TIME



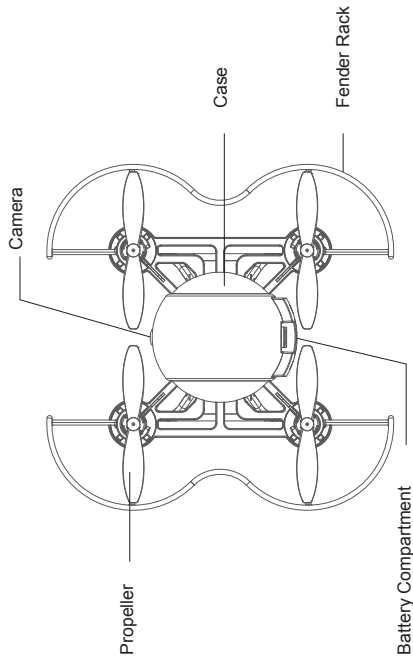
-  Headless mode
-  One key return
-  3-axis roll
-  Video
-  Picture
-  Flight plan
-  APP
-  Atom

GlENG

T902W

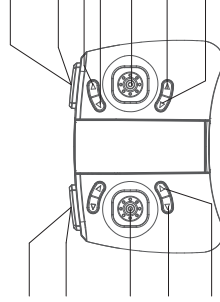
Component name

1. Aircraft



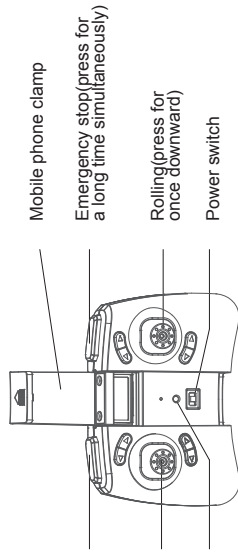
2. Remote control

Left-hand accelerator (mode 2)



- One-key flight (press for once)
- One-key landing (press for once again)
- Accelerator/left-right steering joystick
- Left steering fine tuning
- Right steering fine tuning

- Headless mode (press for 2 sec for a long time)
- One-key course reversal (press for once for a short time)
- Front fine tuning
- Back fine tuning
- Front-back, left-right/rolling joystick
- Right fine tuning
- Left fine tuning



Mobile phone clamp

Emergency stop (press for a long time simultaneously)

Rolling (press for once downward)

Power switch

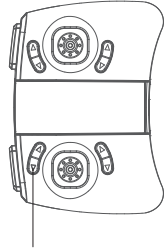
Emergency stop (press for a long time simultaneously)

High-middle-low speed switch (press once downward for once)

Power indicator

Right-hand accelerator (mode 1)

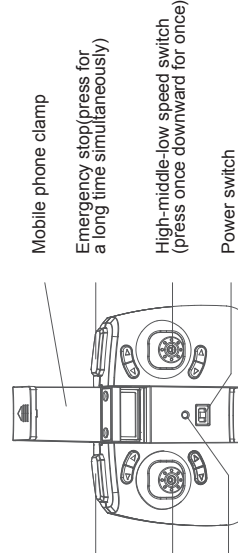
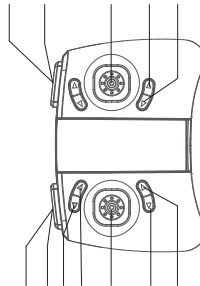
Press the button tightly and press switch to turn on simultaneously.



Headless mode (press for 2 sec for a long time)
One-key course reversal (press for once for a short time)

Accelerator/left-right joystick
Right fine tuning
Left fine tuning

One-key flight (press for once)
One-key falling (press for once)
Front fine tuning
Back fine tuning
Front-back/left-right steering joystick
Left steering fine tuning
Right steering fine tuning



Mobile phone clamp

Emergency stop (press for a long time simultaneously)

High-middle-low speed switch (press once downward for once)

Power switch

Emergency stop (press for a long time simultaneously)

Rolling (press for once downward)

Power indicator

Attentions

1. Official Statement

- (1) This device is a sophisticated piece of technology that combined professional knowledges such as mechanism, aerodynamics and HF transmitter, thus must NOT be used as a toy. User must act caution and operate safely; if not, it may leads to severe accidents which result in critically physical injury or economic losses, under this circumstance we manufacturers claim no responsibility as we are not able to monitoring the process of the installation and operation carried out by the user.
- (2) This device is best to be operated by experienced UAV users whose age is above 14.
- (3) Only to be operated in legal UAV operating space according to local laws.
- (4) The manufactures will claim no safety responsibility relevant to operation, usage and controlling of the device after it is sold.
- (5) We authorized the dealers to provide technical support and after sale service, should there be any issue on operating or need for reparation, please contact your local dealer.

2. Precautions

- (1) Keep away from obstructions or crowd.
UAV poses a potential threat since it's uncertainty on flight speed and conditions. Must keep it away from crowd, buildings, HV cables, etc. when inflight, to ensure the safety of people and properties around the user. This device is also not capable of flying under stormy, rainy or thundering weather conditions.
- (2) Do not operate in humid environment.
Inside of the device installed various kinds of sophisticated electronic and mechanical components, thus it's essential to keep the device dry at all times to avoid any components malfunction due to the humid environment.
- (3) Operate safely
The user should operate the UAV in good self-condition with caution. Operate when fatigue, in poor mental state or poor handling could result in accident.
- (4) Keep away from high spinning unit.
The user and crowd must keep away from the propellers when they are in high spinning state, to avoid any danger or damage.
- (5) Keep away from heat source
This UAV is consist of metal, plastic, electronic components etc., heat source or direct sunlight could bring deformation or damage to the device.

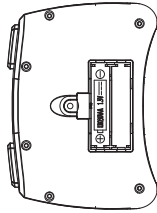
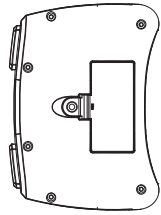
3. Before flight

- (1) Choose an wide open space to operate, we suggest at least 8m(L) x 8m(W) x 5m(H).
- (2) Make sure both batteries on the remote controller and the device are full.
- (3) Make sure the joysticks on the controller are in lowest end before operating.
- (4) When turn on the device, the right sequence apply. The wrong sequence would result in UAV out of control, thus possible damage. Please develop a habit to follow the right turn on/off sequence.
- (5) Make sure the battery is solidly connected to other components like the motors. The continuous vibration could loosen the connection which result in losing control of the device.
- (6) Crashing could affect the motors or result in noise, therefore affect the flying conditions or even device breakdown. Should that happen, contact the local dealer as soon as possible to change the components, so the device could recover its groove.

Remote control assembly

An installation method of batteries:

Use a manual screwdriver to rotate and open the battery cover in an anticlockwise direction, put 2 No.7 alkaline batteries in accordance with electrode instructions of the battery box correctly(batteries should be purchased additionally), close the battery cover and lock screws of the battery cover.



Notes:

1. Battery socket should be installed in the proper position to prevent from poor power contact;
2. Please pull out the battery socket, if the remote control isn't used for a long time.

Description of battery charging

1. First of all, connect USB recharge socket with the recharge socket of the aircraft, and then connect USB to the recharge USB interface in any way as follows.(Please give priority to select 5V 2A recharger to recharge)
2. As batteries of the aircraft are recharged, the light is on. After finishing recharging, the light is off. The recharging time is about 65 min.



NOTE:For faster charging,it is recommended to use a 5V 2A AC Adapter(not enclosed)to charge the battery.

Charging Methods



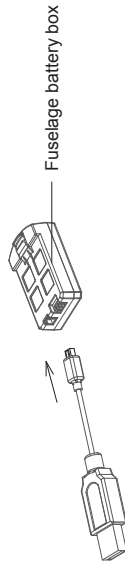
Power bank



Computer



Car charger

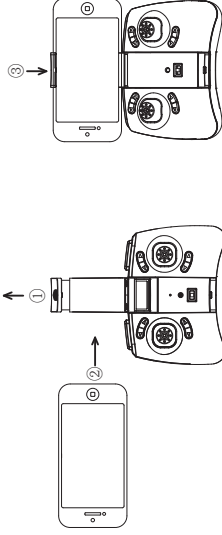


Fuselage battery box

- *The product accessories have built-in lithium batteries. Please pay attention to safety matters as using.
- *Don't place charged batteries in high-temperature and heated places, such as naked flame or electric heating apparatus. Otherwise, damage or explosion may take place.
- *Don't use batteries to strike or beat hard body surface.
- *Don't soak batteries in water. Batteries should be placed in a dried place.

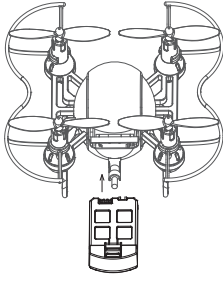
Mobile phone is installed in the mobile phone clamp.

1. Press the remote control and pull out the mobile phone clamp outward;
2. Put the mobile phone in the mobile phone clamp.
3. Let the mobile phone clamp tighten the mobile phone, avoid from the keypad and prevent from damping the key.



Flight steps

1. Install aircraft batteries in the aircraft, place the aircraft on the smooth ground, and show quick flashing state for the aircraft fuseage.

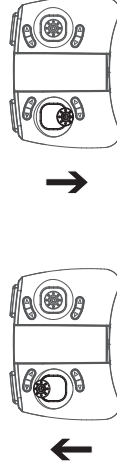


Important hints

After the aircraft is electrified, gyroscope on the dash receiver needs to revise the horizontal plane and ensure horizontal ground, thus the aircraft can enter into a normal remote control state.

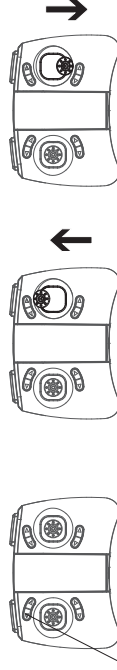
2. Left-hand accelerator mode 2

Install batteries in the remote control, press power switch, push the accelerator to the maximal control distance and then put it in the bottom. Remote control indicator is normally on and enters in the normal remote control state. Frequency connection is completed. The aircraft can fly normally.



3. Right-hand accelerator mode 1

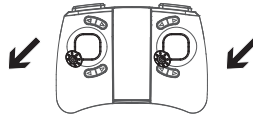
Press fine tuning button downward and press power switch, flash remote control indicator slowly push accelerator to the maximal control distance and then put it in the bottom. Remote control indicator flashes slowly and enters in the normal remote control state. Frequency connection is completed. The aircraft can fly normally.



Press the button tightly and press switch to turn on simultaneously.

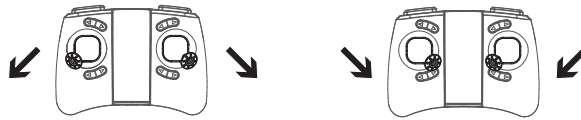
Calibration specification of the aircraft

The left-right joystick of remote control is pushed to the left corner. The aircraft fuselage indicator flashes. After fuselage recovers to normally on, it means to finish calibration. The aircraft can be used in normal (notes: left-right mode has the consistent operation).



Unlocking/locking function of the aircraft

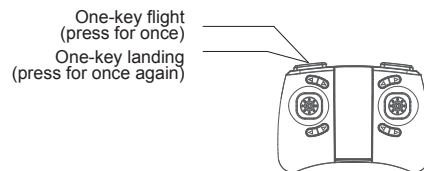
1. The aircraft is placed on the plane. Left and right rockers of remote control are pushed to the bottom from toeing out or toeing in, respectively. The paddle of the aircraft rotates. At the moment, the aircraft is unlocked and it can enter into the flight mode. Then left and right rods of remote control are pushed to the bottom from toeing out or toeing in, respectively, the paddle of the aircraft stops rotating. At the moment, the aircraft is locked.



Notes: After the aircraft is unlocked, it can operate normally. Otherwise, it can't be operated.

One-key flight function/One-key landing

1. The aircraft is placed on the horizontal plane. Left and right rockers of remote control are pushed to the bottom from toeing out or toeing in, hold for about 1 seconds, the remote control gives out "di" for once. At the moment, the paddle of the aircraft rotates. After pressing the left corner button of the remote control, the aircraft takes off from the ground. The hovering height is 1.0-1.5m.



2. The aircraft flies in the air. After pressing one-key landing function button, the aircraft lands on the ground slowly.

Emergent stopping function

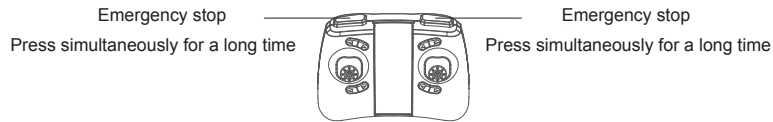
Emergent stop:

If there is an emergency, please stop rotating the paddle of the aircraft and press "one-key flight/one-key course reversal" button simultaneously.

Notes: If the aircraft flies in high position, don't operate it in this way, because this makes the aircraft lose flight power, resulting in air crash in high altitude.

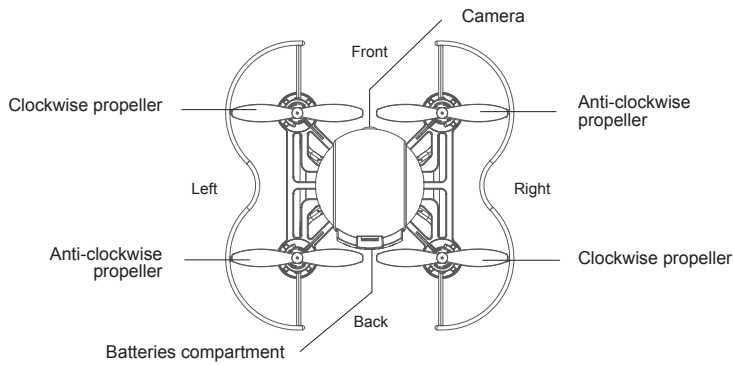
Emergency stop:

By pressing the top left and right corners simultaneously, fans of the aircraft can stop rotating at any situation.



Additional remarks before flight

1. The camera direction on the fuselage shell is the front direction of the aircraft.



2. After the aircraft is electrified, check the rotation direction of propeller. Left front direction/right back direction rotates in clockwise of propeller. Right front direction/left back direction rotates in counterclockwise of propeller.

3. If The aircraft is partial to one side in the flying process, remote control fine tuning can be used to adjust.

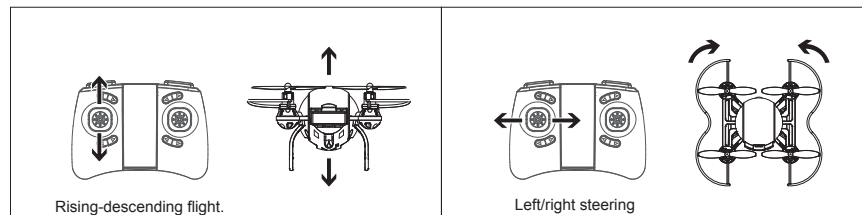
4. In the flying process, when aircraft has sufficient electric quantity, fuselage indicator turns to flash from normally on to warn. At the moment, players should fly back the aircraft within 30sec to replace batteries or charge them before continuing to fly.

5. When there is low voltage as working the remote control and remote control gives out didi~didi~didi~, players should fly back the aircraft in time to continue to fly after replacing batteries.

6. In the flight process, man-made operation or environmental actor may make the aircraft suffer from impact of external force, resulting in poor flight effects. Thus, it is necessary to put the aircraft on the ground and ensure normal flight state after recalibration.

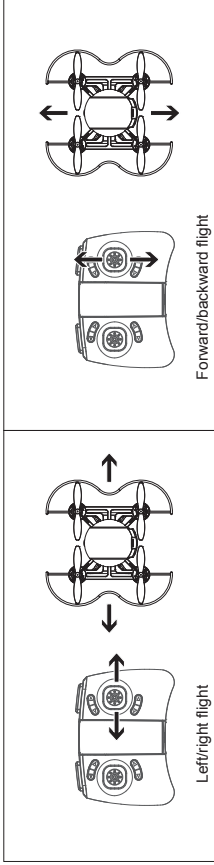
Flight control and fine tuning

Left-hand accelerator mode 2

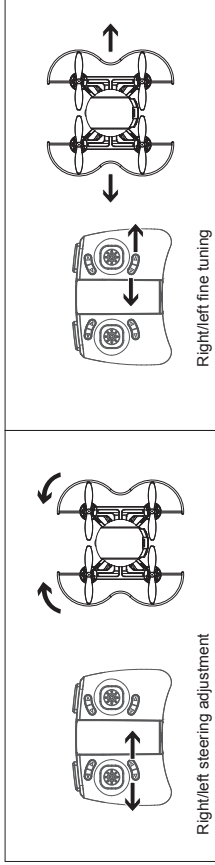


1. When accelerator joystick is operated upward and downward, the aircraft flies upward and downward simultaneously.

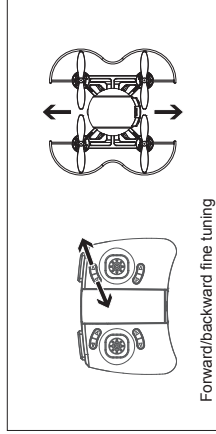
2. When steering joystick is operated in left and right directions, the aircraft head flies in left and right directions.



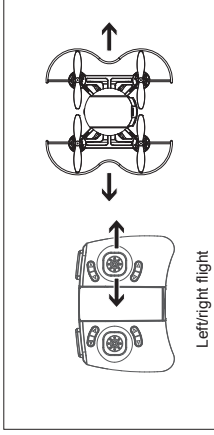
3. When left-right joystick is operated in left and right, the aircraft flies in left and right directions. When forward-backward joystick is operated upward and downward, the aircraft flies forward and backward simultaneously.



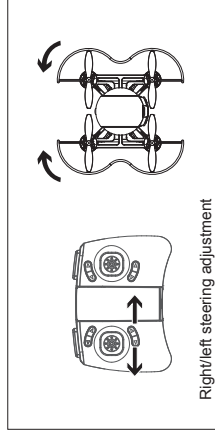
5. Steering fine tuning is adjusted. As flight, head is partial to the left. Fine tuning is adjusted to the right. On the contrary, fine tuning is adjusted to the left.



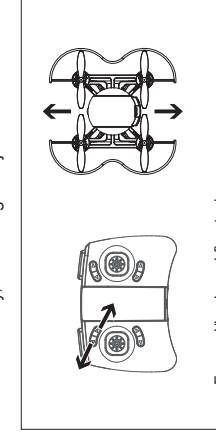
7. Forward-backward fine tuning is adjusted. As flight, fuselage is partial to the forward. Fine tuning is adjusted backward. On the contrary, fine tuning is adjusted upward.



3. When right-right joystick is operated in left and right directions, the aircraft flies in left and right directions simultaneously. When forward-backward joystick is operated upward and downward, the aircraft flies forward and backward simultaneously.



5. Steering fine tuning is adjusted. As flight, head is partial to the left. Fine tuning is adjusted to the right. On the contrary, fine tuning is adjusted to the left.

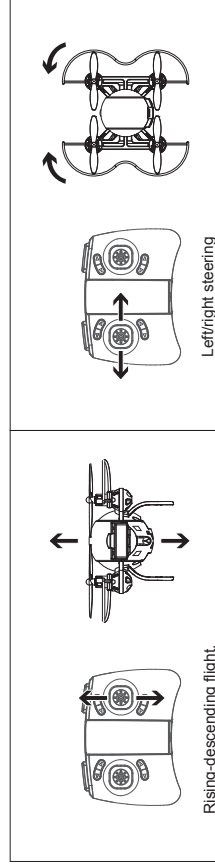


7. Forward-backward fine tuning is adjusted. As flight, fuselage is partial to the forward. Fine tuning is adjusted backward. On the contrary, fine tuning is adjusted upward.

High-middle-low speed mode

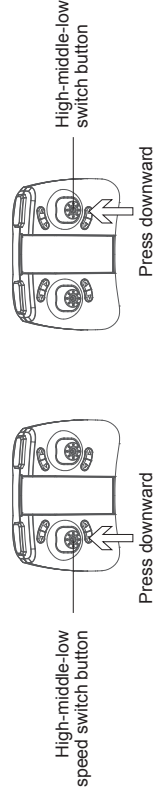
The aircraft has three grades of high-middle-low speed mode. Press high-middle-low speed mode button on the remote control, and remote control will give out di, didi and dididi, representing low, high and middle modes, respectively. Default is middle speed mode. Middle speed mode is suitable for beginners and high speed mode is suitable for experts).

Right-hand accelerator mode 1



1. When accelerator joystick is operated upward and downward, aircraft flies upward and downward simultaneously. When steering joystick is operated in left and right directions, the aircraft head flies in left and right directions simultaneously.

Right-hand accelerator mode 1

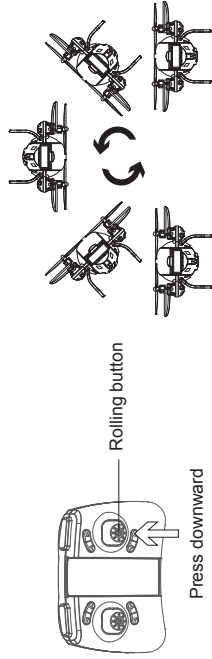


Press downward

Rolling mode

Left-hand accelerator mode 2 rolling mode

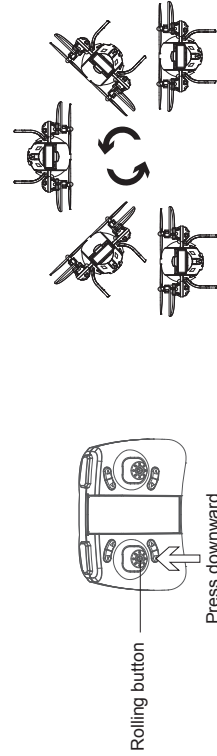
When the aircraft flies in the air, press the right rocker on the remote control, and remote control gives out dididi, showing that the aircraft enters into the rolling state. Joystick is pushed to the maximal distance in any direction of front, back, right and left. Then loosen it. The aircraft rolls in 360° direction in front, back, right and left, respectively. Meanwhile, rolling mode will be closed automatically.



Warnings: The action must have sufficient flight space. Otherwise, it may generate risks.

Right hand accelerator mode 1 rolling mode

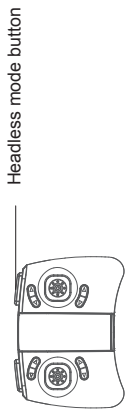
When the aircraft flies in the air, press left rocker of the remote control downward and remote control gives out dididi, showing that the aircraft enters into the rolling state. The left joystick is pushed to the maximal distance forward and downward and it is loosened. The aircraft rolls in 360° direction forward and downward simultaneously. Meanwhile rolling mode is closed automatically. Right joystick is pushed to the maximal distance in left and right directions and it is loosened. The aircraft rolls 360° in the corresponding direction simultaneously. Meanwhile, the rolling mode will be closed automatically.



Warnings: The action must have sufficient flight space. Otherwise, it may generate risks.

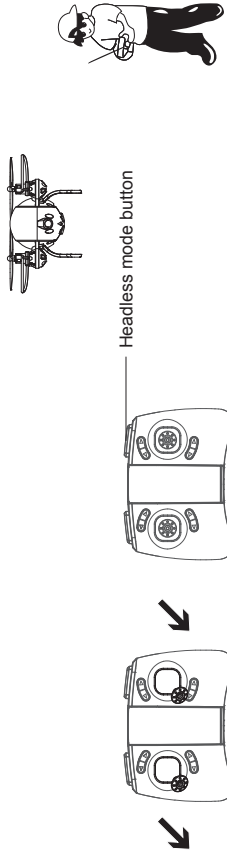
Headless mode

Press the headless mode of the remote control for about 1 sec, the remote control gives out "di.di.di" for three times, the fuselage's light flashes quickly, meaning to enter into the headless mode. Press the headless mode of the remote control, the remote control gives out "di" for once, the fuselage's light is normally on, and the aircraft exits the headless mode.



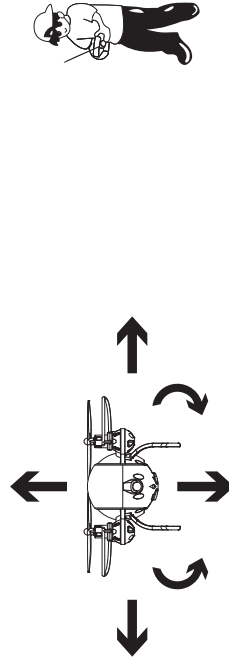
The aircraft direction of standard headless mode

Before the aircraft enters into the headless mode, it is necessary to verify the flight direction. The aircraft head aims at the front direction of the operator. Meanwhile, left-right rocker of remote control is pushed to left corner for about 2 sec, the aircraft fuselage indicator turns to fast flashing from normally on for 2 sec and recovers to normally on. The flight direction of the aircraft is verified.



The flight direction control of the aircraft under the headless mode

Under the headless mode, the control direction of the aircraft regards the fuselage head direction as the front direction as the calibrated direction of the aircraft. When operators operate the aircraft, it must face to fuselage direction of the aircraft calibrated direction. Otherwise, it can't control as the operating direction. The specific control is shown as follows:



- (1) Remote control rocker pushes forward. The aircraft flies to the front of the operator.
- (2) Remote control rocker turns to the right. The aircraft turns to the right of the operator.
- (3) Remote control rocker pulls back. The aircraft flies to the back direction of the operator.
- (4) Remote control rocker turns to the left. The aircraft turns to the left of the operator.
- (5) Remote control rocker flies to the left. The aircraft flies to the left direction.
- (6) Remote control rocker flies to the right. The aircraft flies to the right direction.

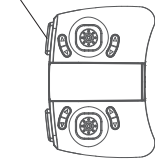
Attentions:

- When planning to fly in the headless mode, it is necessary to confirm the control direction of the aircraft and calibrate the control direction of the aircraft. Moreover, operator must face to the calibrated direction of the aircraft, namely the direction pointed by fuselage. In the control process, don't change, for fear of impacting aircraft control.
- As flying in the headless model, aircraft may have artificial strike or longer accumulated time of flight, resulting in deviation in headless control and impacting flight control. The aircraft can be calibrated under the headless mode, ensuring flight control recovers to normal.

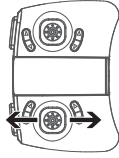
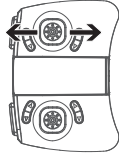
One-key course reversal

In the flying process of the aircraft, press one-key course reversal. The remote control gives out "di" 3 interval, showing that the aircraft returns. The aircraft will fly backward in the direction of the operator. It only needs to push the directional rocker forward or backward or press one-key course reversal button to cancel course reversal function. Meanwhile, warning voice will stop.

Headless mode button



Right-hand accelerator mode 1

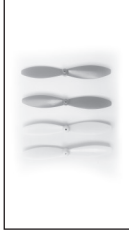


Guidance of common problems

Problems	Reasons	Countermeasures
The aircraft fuselage indicator is flashing. Operation has no response.	<ol style="list-style-type: none"> The aircraft fails to connect frequency with the remote control. Aircraft has insufficient electric quantity. 	<ol style="list-style-type: none"> Refer to (flight operation steps) to connect frequency again Charge for the batteries.
Aircraft fan rotates, but it can't fly.	<ol style="list-style-type: none"> Batteries have insufficient electric quantity Fan deformation or wrong installation 	<ol style="list-style-type: none"> Charge for the batteries Replace fan
Aircraft shocks fiercely.	Fan deformation Axle bending	<ol style="list-style-type: none"> Replace fan Replace axle
Fine tuning is adjusted to the bottom, but it can't stabilize the aircraft.	<ol style="list-style-type: none"> Fan deformation Poor motor 	<ol style="list-style-type: none"> Replace fan Replace motor
After striking, the aircraft flies again. It is out of control and flies at random.	Gyroscope is out of balance for striking	Refer to (gyroscope calibration specification) to calibrate the fuselage

Accessories(Additional purchase)

Available accessories are shown as follows. For convenient purchasing of customers, every part is listed particularly. Customers can purchase accessories through local dealers.



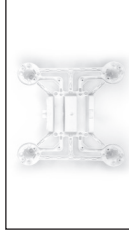
Propellers
T902W-1



Upper and lower cover
T902W-2



Motor cover
T902W-3



Main frame
T902W-4



Fender racks
T902W-5



Landing gears
T902W-6



Battery
T902W-7



Receiving panel
T902W-8



Photographing panel
T902W-9



Reverse motor
T902W-10



Forward motor
T902W-11



USB charging cable
T902W-12



Remote Controller
T902W-13

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.