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

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 equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Q353

WLTOYS

LAND, SEA, AIR AND SPACECRAFT

INSTRUCTION MANUAL

Helicopter In The House!

2.4G
WLTOYS

DATA
TWO-WAY TRANSMISSION

Contents

Thank you for buying WLTOYS products. The Q353 is the latest technology in Rotary RC models. Please read this manual carefully before assembling and flying the new Q353 helicopter. We recommend that you keep this manual for future reference regarding tuning and maintenance.

1.INTRODUCTION

Thank you for purchasing Weili products! This is a spacecraft, in the air, surface, land navigation of the amphibious spacecraft, in order to make your more convenient and more easy to control the aircraft, please read this manual carefully after this operation, , As a reference for future adjustments and maintenance.

flight vehicle can satify you whatever rainy or sunny,even when outdoor wild grade 3-4, it will keep moving.

WARNING LABEL LEGEND

WARNING	Mishandling due to failure to follow these instructions may result in damage or injury.
CAUTION	Mishandling due to failure to follow these instructions may result in danger.
FORBIDDEN	Do not attempt under any circumstances.

IMPORTANT NOTES

Helicopter is not a toy, miniature remote control four-axis aircraft, but there is still some risk of the matter with instructions to correctly use the model in accordance with the Security, the dismantling of any modification or improper use of the product are not familiar with may be dangerous to the risk of unexpected or accidental, please do not overlook.

Manufacturer and dealer assume no liability for accidental damages by abnormal wear of parts,inproper assembly,or operation in unsafe manners.This product is intended for use by age 15 years or older.Please ensure the product is operated under safe environment.

We recommend that you seek the assistance or an experienced pilot before attempting to fly our products for the first time. A local expert is the best way to properly assemble, setup, and fly your model for the first time. The requires a certain degree of skill to operate, and is an item subject to normal wear and tear. Any damage or dissatisfaction as a result of accidents or modifications are not covered by any warrantee and cannot be returned for repair orreplacement. Please contact our distributors are not covered by any warrantee and cannot discounted rates when you experience problems during operation or maintenance.

2. SAFETY NOTES

CAUTION

Fly inly insafe areas away from other people.Do not operate R/C aircraft within the cicinty of crowds or people.R/C aircraft are prone to accidents ,failures,and responsible for their actions and damage or injury occurred during pilot error,and radio interference.pilote are responsible for their actions and damage or injury occurred during the operation or as of a result of R/C aircraft models.

FORBIDDEN

This product is suitable for indoor and outdoor(the wind grade should be no more than 4), please choose a place without obstacle, and keep distance from crowd and pets, don't play it under unsafty, for instance, heat source, wire or electonic power source, in order not to be damaged by collision landing, entanglement and lead to a fire, electric shock and cause losses of lives and property

18. TROUBLE SHOOTING DURING FLIGHT

	Situation	Cause	Way to deal
1	Start the aircraft power supply, the indicator light continues to flash, the operation no response.	Unable to bind to transmitter.	Repeat the power up initializing process. (Refer to P.6:Binding of radio transmitter and receiver)
2	Press the aircraft start button does not have any reaction.	1, lithium battery power shortage, 2. start button is bad.	1, the battery fully charged, 2, replace the start button.
3	Motor does not respond to throttle stick, receiver LED flashes.	Helicopter battery depleted.	The aircraft fully charged.
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.	1.Deformed main blades. 2.Helicopter battery depleted	1. Replace the main rotor 2. Fully charge the aircraft.
6	Strong vibration of helicopter	1.Deformed main blades	1.Replace main blades
7	Tail still off trim after tab adjustment, or inconsistent speed during left/right pirouette.	1.Damaged tail rotors 2.Damaged tail drive motor	Replacement of the main wing Replace the main motor
8	Helicopter still wonders forward after trim adjustment during hover.	1.Elevator servo not level during power up. 2.Elevatoer pushrod too long or too short.	The boot will lift fine-tune the normalized neutral point, the new boot.
9	Can not fly the aircraft fail	1. motor fall out 2. gear loosen	1. install the motor again 2. tighen the gear
10	Airship is not controlled, and can not afford to power off or can not afford to fly off the normal power supply.	1.Crashes 2.Start key short-circuit water.	1. Open the airship charging port, pull out the shorting cap, cut off the power, and then re-installed. 2. Unplug the airship to the level, and then re-install the shorting cap. 3. Dry the aircraft.
11	1, start or deformation of the tooth box has been Kaka ringing.	1, leaf switch bad contact, 2, the blade switch plug off.	1, replace the blade switch, 2, re-plug the plug.

Specifications ,contents of parts and avsilability are subject to change,Align RC is not responsible for inadvertert erros in this publication.

11. AIRCRAFT GYRO CALIBRATION

★ When the aircraft hover off more, the aircraft flat on the flat surface at any rudder volume, the fine tune back, while the remote control of the two joystick to the lower left corner hit the end of about 2 seconds, then the aircraft The indicator light flashes, loosen the joystick, the aircraft flashes for 2 seconds and stops flashing, and the calibration is done.

12. Headless mode

The aircraft on the front, the code take off long press the remote control headless mode button for 2 seconds into the headless mode, the remote controller issued a drop of sound, into the headless mode, headless mode, the aircraft indicator flashes, remote control Device issued a drop of sound, long press 2 seconds to exit the headless.
Note: When using headless mode, the airplane must be placed before the code.

13. A key return

Long press the return button for 2 seconds, the remote control issued a drop of sound aircraft flashing lights, the aircraft began to return, remote rocker out.
note! In the use of return, the aircraft must be in the code when the head is placed forward, and in flight, the controller can not change the direction.

14. AND MODE CONVERSION

Click the sea and air mode switch button, enter the land and sea mode, the aircraft behind the two propeller tilted forward 60 degrees, the propeller thrust from the upward shift to backward, can push the aircraft 30 km on land, 20 km water speed forward.
Note: 1. Before launching the aircraft, please cover the waterproof cover to prevent the aircraft into the water caused by failure.
2. When the aircraft sails on the surface of the water, because the wind beat the surface of the aircraft board overcurrent protection (light flashes), the throttle stick after zero can continue to sail. After the aircraft in the water capsize, push the throttle stick, the aircraft will automatically flip over.
3. In the water mode, please do not take a long time to avoid high speed sailing too fast may cause the aircraft to rise caused by the risk of somersault! In the land and sea mode, the throttle rocker pushed up, power foot, the aircraft will fly away, fly (After the control joystick backward shakes, can reduce the speed of forward), please fly in the absence of empty places, so as not to speed too fast and the operation of the reaction, however, causing danger. Long flight in the water, will affect the motor life.
4. After the end of the flight to open the waterproof cover, dry switch plate to prevent the cover did not cover the water caused by failure.

15. STUNT PLAY

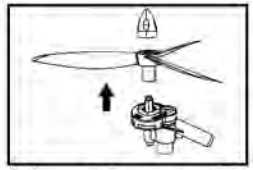
When the aircraft in the land and sea mode, high-speed navigation, press the land, sea and air mode button, the aircraft will fly away, very spectacular.

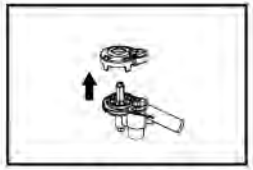
16. LOW POWER RETURN

When the aircraft into the low-voltage state when the "aircraft lights flashing", the remote control issued a drop of alarm sound, the aircraft after the flight of the flight time is relatively short, please control the aircraft return.

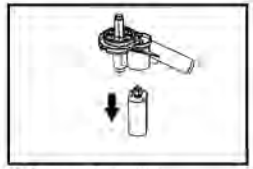
17. MOTOR REPLACEMENT DIAGRAM

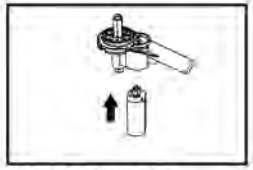

1. Unpack the motor base.


2. Remove the screw cap and remove the blades.


3. Unscrew the motor cover.


4. Unscrew the motor screws.


5. Remove the motor.


6. Install the new motor.

FORBIDDEN PROPER OPERATION

To avoid potential fire hazard from batteries, please do not short, reverse polarity, or puncture batteries. Battery charging must be done under supervision at all times, and at location out of reach by children. Double check the four AA batteries are rechargeable Ni-CD/MH batteries before charging. The manufacturer or this product will not be liable for accidental damages incurred by charging non-rechargeable batteries.

FORBIDDEN SAFETY NOTE FOR NI-MH BATTERIES

Make sure the batteries are installed based on polarity indicated in the case and do not mix batteries of different chemistry/spec. Please take out the batteries if you are not going to use for a long time to avoid potential leakage which may damage the transmitter.
Please dispose depleted batteries according to local laws and ordinances. Do not dispose improperly.

FORBIDDEN SAFETY NOTE ON LI-POLYMER BATTERIES

Li-Polymer batteries poses higher operational risks compared to other battery chemistry, thus it is imperative to follow its usage instructions. Manufacturer and dealer assume no liability for accidental damages caused by improper usage.

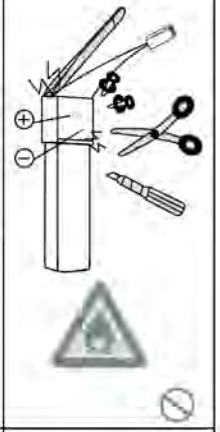
Do not use charger other than the factory supplied unit to avoid potential fire and explosion.

Do not crush, disassemble, burn, and reverse polarity. Avoid metallic materials to come into contact with battery"s polarity and cause it short and never puncture batteries to avoid fire hazards.

Battery charging must be done under supervision at all times, and at location out of reach by children.

Please stop the use or charge of the battery should there be an unusual increase in battery temperature after use. Continue use of this battery may cause it to expand, deform, explode, or even result in fire hazards.

Please dispose depleted batteries according to local laws and ordinances. Do not dispose improperly.



CAUTION KEEP AWAY FROM HEAT

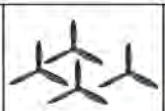
R/C models are made of various forms or plastic. Plastic is very susceptible to damage or deformation due to extreme heat and cold climate .Make sure not to store the model near any source of heat such as an oven,or heater .It is best to store the model indoors ,in a climate-controlled,room temperature environment.

WARNING OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT

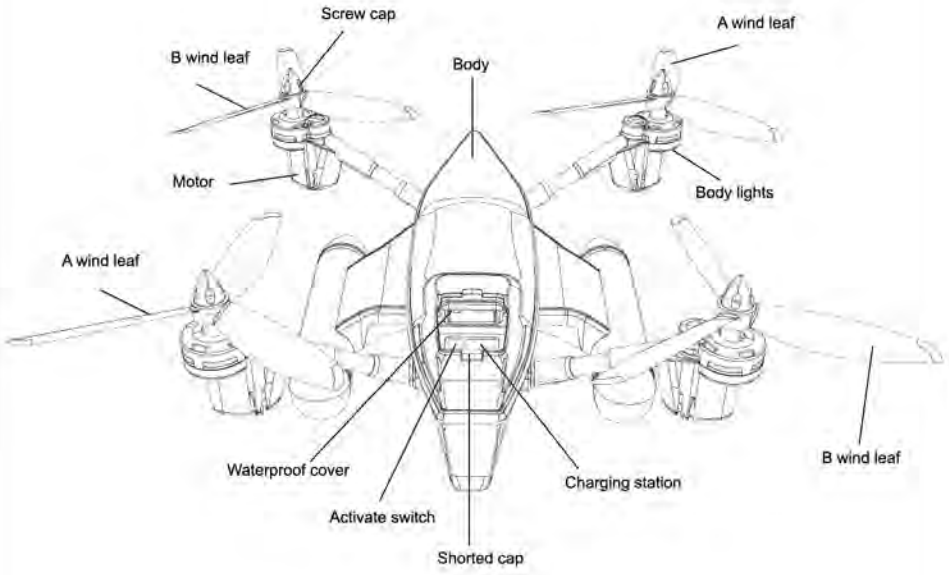
The products are suitable for more than 15 years old age.
at the beginning it will have some certain difficulty in learing, suggestion guidance by exprienced when playing.

3.STANDARD EQUIPMENT

标准配件

			
Q353 Lipo charger x 1	Tail Blade X 4	Charging Cable	screwdriver

4.NOMENCLATURE



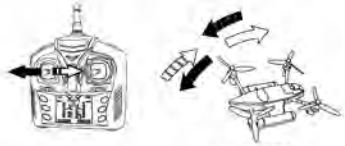
STEP 2 AILERON AND ELEVATOR CONTROL PRACTICE

CAUTION

◎ If the nose of the flight vehicle moves,please lower the throttle stick and langd the flight vehicle.Then move your position diagonally behind the flight vehicle 2m and continue practicing.
◎ If the flight vehicle flies too far away from you,please land the flight vehicle and move your position behind 2m and continue practicing

STEP 3 RUDDER CONTROL PRACTICING

1.Slowly raise the throttle stick.
2.Move the nose of the flight vehicle to right or left,and then slowly move the rudder stick in the opposite direction to fly back to its original position.



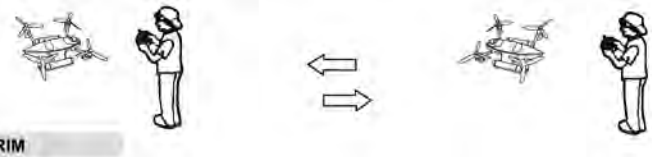
STEP4

After you are familiar with all actions from Step 1 to 3 ,draw a circle on the ground and practice within the circle to increase your accuracy.

◎ You can reduce the size of the circle as you become familiarized with the control reflexes.

STEP 5 Change the direction of the aircraft and practice hover

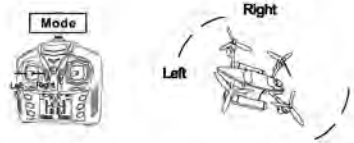
After you are familiar with Step 1 to 4, stand at side of the helicopter and continue practicing Sterp 1 to 4.
Ther repeat the Step 1 to 4 by standing in front of the helicopter.



ADJUSTMENT OF EACH TRIM

Slowly raise the throttle stick and just as the helicopter lift-off the ground,
you can use the trim to correct the action if the helicopter leans in a differnt direction.

1.Adjustment of rudder trim
Just before the helicopter lift-off, the nose lean left/right...
When leans right, adjust the trim to left side.
When leans left, adjust the trim to right side.



2.Adjustment of elevator trim
Just before the helicopter lift-off, the nose lean forward/backward...
When leans forward, adjust the trim to down.
When leans backward, adjust the trim up.

3.Adjustment of aileron trim
Just before the helicopter lift-off, the body lean left/right...
When leans right, adjust the trim to left side.
When leans left, adjust the trim to right side.

10.FLIGHT ADJUSTMENT AND SETTING

Pre-flight simulation before the flight

Before you are familiar with the flight vehicle,pleasure don ' t set it fly,read the instruction carefully.
Ger familiar with all kinds of direction control and keep repeating until you can play it as you perform your wishes
1.Place the flight vehicle a clear open field and the tail of helicopter point 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 when you hear operation orders being call out

Mode	Illustration	Mode	Illustration
Aileron	Move left / Move right	Throttle	Ascent / Descent
Elevator	Fly forward / Fly backward	Rudder	Turn left / Turn right

FLIGHT ADJUSTMENT AND NOTICE FOR BEGINNERS

CAUTION

◎ Check if the screws are firmly tightened.
◎ Check if the transmitter and receivers are fully charged.
◎ Check if the waterproof cover is covered.

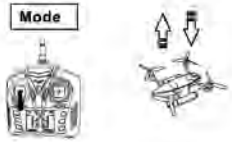
When arriving at the flying field.

CAUTION

◎ Make sure that no people or obstructions in the vicinity.
◎ You must first practicehovering for flying safety.this is a basic flight action. (flight vehicle means keeping the helicopter in mid air in a fixed position)
◎ Please stand approximately 2m diagonally behind the helicopter.
◎ The flight distance of the aircraft is 150 meters, beyond the flight distance of the aircraft will be uncontrolled. Please fly within the effective distance of the aircraft, to avoid the aircraft is not controlled, which led to the aircraft crash.

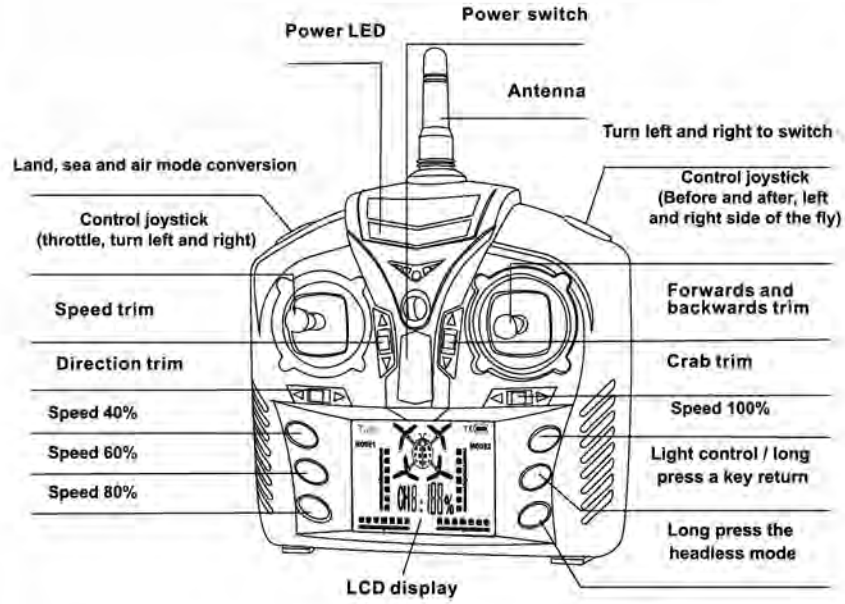
STEP 1 THROTTLE CONTROL PRACTICE

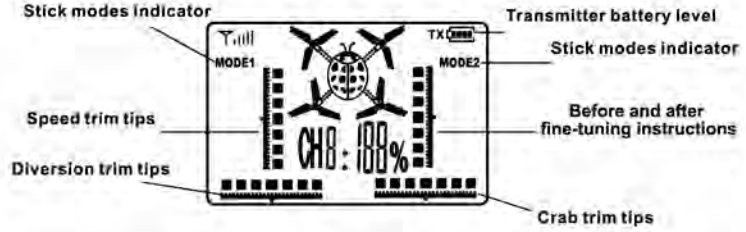
When the flight vehicle begins to lift-off the ground,slowly reduce the throttle to bring the flight vehicle back down. Keep practicing this action until you control the throttle smoothly.



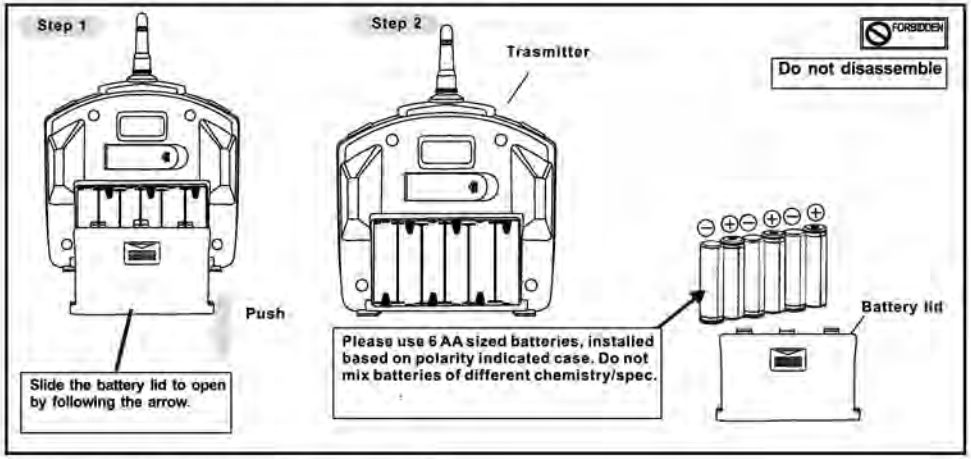
5.NOMENCLATURE

FORBIDDEN
Do not disassemble





6.TRANSMITTER BATTERY INSTALLATION



7.CHARGING BATTERIES

Charge the aircraft battery with a charger

Charge with a dedicated charger, connect one end of the charging cable to the charger, open the waterproof cover, and connect the other end of the charging cable to the vehicle for charging.

WARNING

For safety concerns, battery charging must be done under supervision at all times.

CAUTION

LED Indicator LED

Red light off	Red light
Charge Completion	Charging

Charger Specifications

Input	Charging Current	Full Voltage
220V	800mA	8.4± 0.03V

8.BATTERY AND CHARGER SPECIFCATION

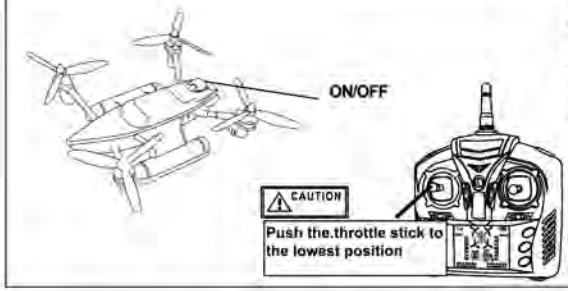
Battery usage and charge duration reference

Battery type	Battery Specification	Usage Duration		Charge Time
Li-po battery	7.4V1200mAH	Flight time of the aircraft	About 6-7 minutes	800mA.About 120 minutes
Carbon-Zinc (Non Rechargeable)	1.5V	Transmitter Operation Time	16 Hours	Non Rechargeable

9.BINDING OF RADIO TRANSMITTER AND RECEIVER

Step 1

Place the aircraft in a flat position, press and hold the aircraft start button for one second to start, and the indicator light on the vehicle flashes.



Step 2

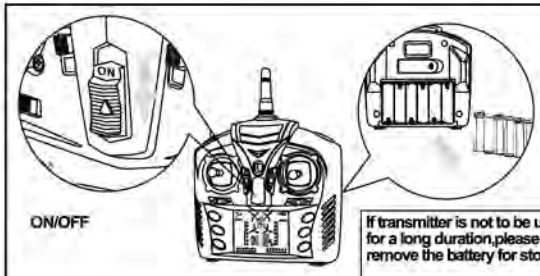
The remote control throttle stick to the minimum, open the remote control power switch, then do not move the fuselage, when the aircraft on the indicator light from flash to slow flash, the remote control throttle from the push to the highest And then pulled to the lowest, then the indicator light becomes bright, the code is completed.

Step 3

End the flight press the start button to turn off the power, please develop good habits so as not to cause regret.

WARNING

Power is not turned off, will lead to excessive discharge of the battery and bad, or even cause the risk of fire burning.



Step 4

Turn off the transmitter.If transmitter is not to be used for a long duration,please remove the battery for storage.

WARNING

Warning:If the AA batteries are left in the transmitter,potential leakage could occur which may damage the transmitter,and create fire hazards.