



User Handbook

Specifications:

Main Rotor Dia. : 55.8mm

Overall Length: 242mm

Overall Width: 242mm

Receiver: RX2640H-D

Standard transmitter: 2402D

Optional transmitter: DEVO-6/7/8S/10/12S

All-up Weight: 70g(Battery included)

Gyro: Six-Axis

Drive Motor: 0720RN

Battery: 3.7V 600mAh Li-Po

Features:

- 1) Adopting octocopter-motors driving system, stable flight, and can easily do the front and back, left and right rolls.
- 2) The usage of 6-Axis gyro and Intergration design of the flight status control ,ensures the precise location of the flight performance.
- 3) Modularized design features convenient maintenance at low cost.
- 4) Flight time will be up to 8 to 9 minutes on a 3.7V 600mAh Li-Po.
- 5) The receiver can upgrade by Walkera homepage.

Contents

01. Forewords	1	09. Flight over	9
02. Safety matters needing attention	1	10. Installation and the	9
2.1 Important Statement	1	Instruction before flight	
2.2 Safety matters needing attention	1	Appendix 1 – Flight control	10
(1) Far away from obstacles and people	1	Appendix 2 – Trimming the flight actions	11
(2) Keep away from humidity	1	Appendix 3 – Flight practice	12
(3) Proper operation and maintenance	1	1 Flight practice for the beginner	12
(4) Avoid flying alone	1	1.1 Matters needing attention	12
(5) Safety operation	2	1.2 Steps	12
(6) Away from highly spinning parts	2	2 Advanced practice	13
(7) Protect from heat	2	2.1 Frog-hopping practice	13
2.3 Attention before flight	2	2.2 Practicing controlled take off and landing	13
03. Definition of UFO Orientation	3	2.3 Practicing square flight	13
04. Standard equipment	3	2.4 Figure eight practice	13
05. Transmitter setup	4	2.5 Roll flight practice	14
5.1 2402D(standard radio)setting	4		
5.2 DEVO-6/7/8S/10/12S(optional radio)settings	5		
06.Setup of the RX2640H-D receiver	6		
6.1 RX2640H-D receiver features	6		
6.2 Function of receiver	7		
6.3 Flight Modes switches of the Receiver	7		
6.4 Adjustment of receiver	7		
6.5 Matters needing attention	7		
07. Instruction for GA006 Charger	8		
08. Steps of flight	8		
8.1 Installation of battery pack	8		
8.2 Turn on the power	8		
8.2.1 Turn on the power	8		
8.2.2 Matters needing attention	8		
8.2.3 Trouble shooting a flashing receiver LED after connecting the power cable	8		



01

Forewords



02

Safety matters needing attention

Dear customer:

Thank you for purchasing a Walkera radio control aircraft product. In order to quickly and safely master the operation of the QR SPACEWALKER, please read the user handbook carefully and then keep it in a safe place for future consultation and reference.

2.1 Important Statement

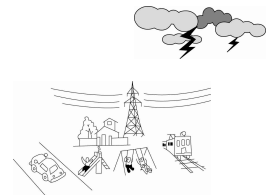
- (1) This product is not a toy. It is a piece of complicated equipment which harmoniously integrates engineering materials, mechanics, electronics, aerodynamic and high frequency radio. Correct installation and adjustment are necessary to avoid accidents taking place. The owner must always operate in a safe manner. Improper operation may result in serious property damage, bodily injury or even death.
- (2) We accept no liability for damage and consequent damage arising from the use of these products, as we have no control over the way they are maintained, used and operated.
- (3) This product is suitable for experienced RC UFO pilots aged 14 years or more. All minors must be accompanied by a responsible adult when flying.
- (4) The flight field should be legally approved by the local government. We accept no liability for any safety duties or fines arising from operation, usage or mis-control after the sale of the products.
- (5) We consign our distributors to offer technical support and service after sale. Please contact the local distributors for problem resolution caused by usage, operation, maintenance, etc.

2.2 Safety matters needing attention

RC UFO flight is a high risk hobby, whose flight should be kept far away from other people. Mis-assembled or broken main frame, defective electronic equipment, and/or problematic radio system will lead to unforeseen accidents such as bodily injury or property damage. The pilot **MUST** pay attention to the flight safety and UNDERSTAND his responsibility for accidents caused by his carelessness.

(1) Far away from obstacles and people

An RC UFO in flight has risk of uncertain flight speed and direction which is potentially dangerous. When flying, please keep your RC UFO far away from people, high buildings, high-tension lines, etc, and avoid operating in rain, storms, thunder and lightening.



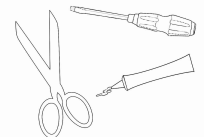
(2) Keep away from humidity

RC UFO should be kept away from humidity and vapor because its complex, precise electronic components and mechanical parts may be damaged.



(3) Proper operation and maintenance

Please use Walkera original spare parts to upgrade, modify or maintain your UFO in order to ensure its safety. Please operate your UFO within the range of functions permitted. It is forbidden to use it outside of the safety laws or regulations.



(4) Avoid flying alone

At the beginning of learning about radio-controlled flight there are some difficulties to overcome. Please avoid flying alone. Invite experienced pilots to guide you (two of the most effective methods to practice are via a PC flight simulator and/or under the supervision of a skilled pilot).



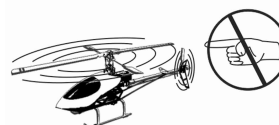
(5) Safe operation

Please fly your UFO according to your physical status and flight skills. Fatigue, listlessness and mis-operation will increase the possibilities of accidental hazard.



(6) Away from highly spinning parts

Please keep pilot, people and object away from the spinning blades of both main rotor and tail rotor.



(7) Protect from heat

An RC UFO is made from metal, fiber, plastic and electronic components, etc. Please keep away from heat and sunshine in order to avoid distortion, even damage, caused by high temperatures.



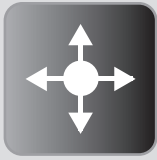
2.3 Attention before flight

- (1) Ensure the battery packs of both transmitter and receiver are fully charged (saturated).
- (2) Ensure both the throttle stick and the throttle trim of your transmitter stay at the lowest positions before operation.
- (3) Please strictly obey the order of turn-on and turn-off before operation. When starting your flight, please turn on your transmitter first, and connect the power cable of your UFO last.
When finishing your flight, please disconnect the power cable of your UFO first, and turn off your transmitter last.
- (4) An upset in the order of connection may cause your UFO to loose control. Please cultivate a correct habit of turn-on and turn-off.



02

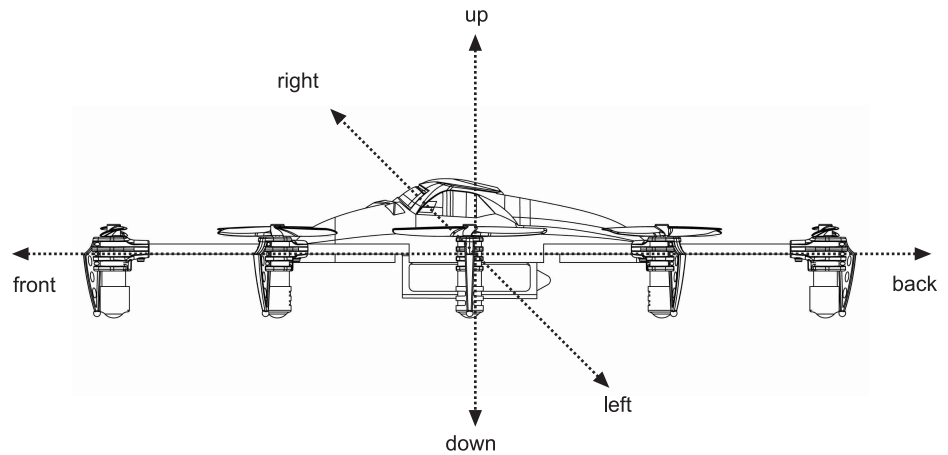
**Safety matters
needing
attention**



03

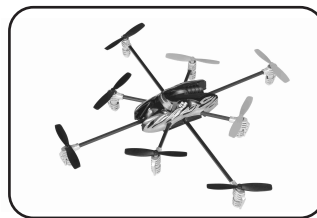
Definition of UFO Orientation

We define the orientation of UFO in order not to cause confusion in the following descriptions. That is to say, the tail boom of UFO is facing the pilot (tail in), and its head facing forward (front of pilot). The left hand of pilot is the left side of UFO, the right hand of pilot is the right side of UFO. Its head is to the front and its tail boom is to the back. The direction in which main body of UFO is facing is up, and its skids are facing down.



04

Standard equipment



▲ QR SPACEWALKER



▲ Transmitter



▲ Li-polymer battery pack



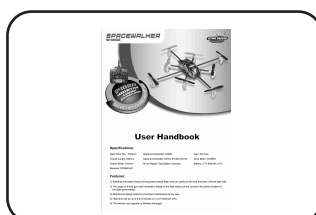
▲ GA006 charger



▲ Tool kit



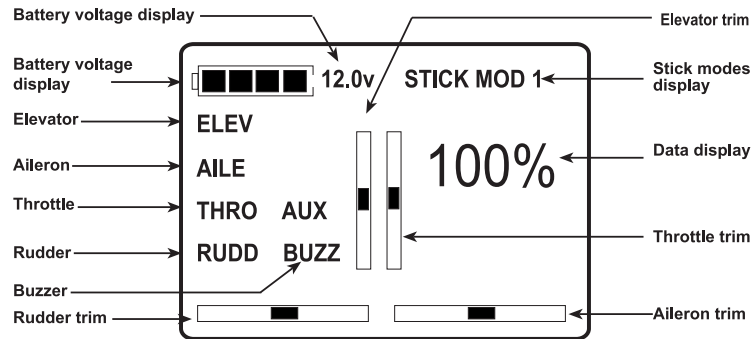
▲ Main rotor blades



▲ User Handbook

5.1 2402D(standard radio)setting

5.1.1 Main Menu

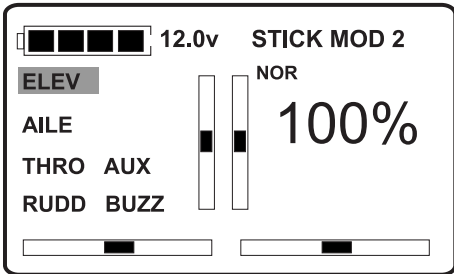
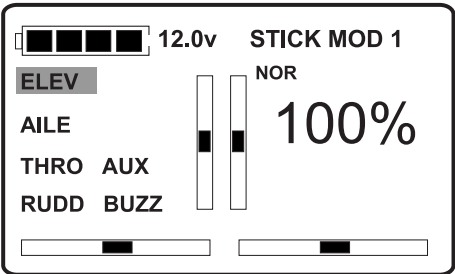


When turning on the transmitter power, the buzzer rings, and 4 trims bars begin to make stream-like movements. After the ID binding is finished, both buzzing and trim bars stream-like movements stop, instead of opening screen appears.

5.1.2 Channel Reverse Setup

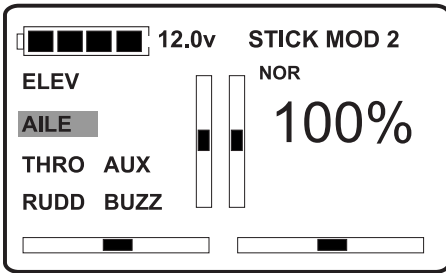
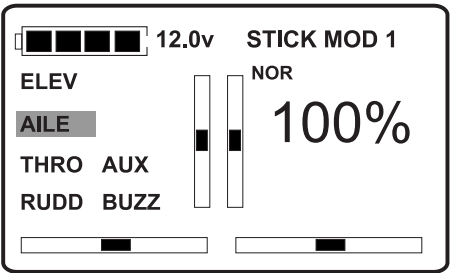
ELEV reverse setup

Press ENT to enter the setting status and both ELEV and the current reverse status NOR or REV are together flashing. If want to make reverse, Press R or L to let NOR flashing, and then press ENT to confirm. Press EXT to exit .



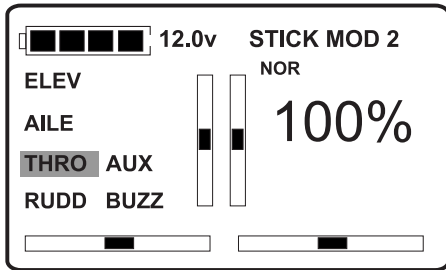
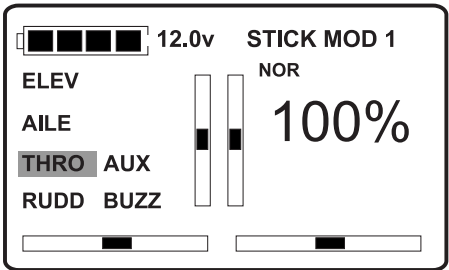
AILE reverse setup

Press ENT to enter the setting status, and both AILE and the current reverse status NOR or REV are together flashing. Press UP or DN to flash AILE while its current reverse status NOR or REV is also flashing. Press R or L to make NOR flashing and press ENT to confirm. Press EXT to exit .



THRO reverse setup

Press ENT to enter the setting status, and both ELEV and the current reverse status NOR or REV are together flashing. Press UP or DN to flash THRO. Both THRO and its current reverse status NOR or REV are together flashing. Press R or L to let NOR flashing, and then press ENT to confirm. Press EXT to exit .



05

Transmitter
setup

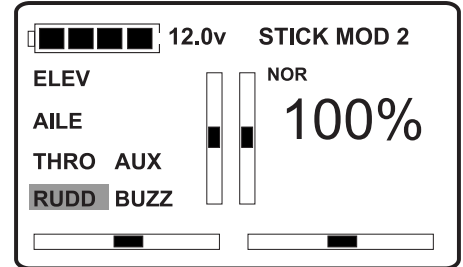
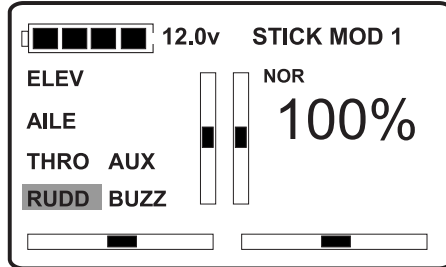


05

Transmitter setup

RUDD reverse setup

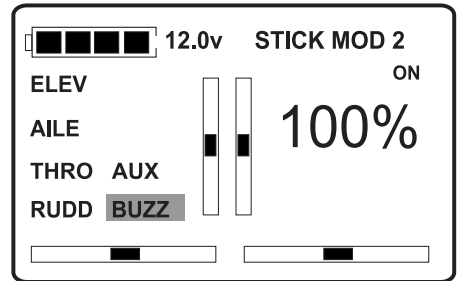
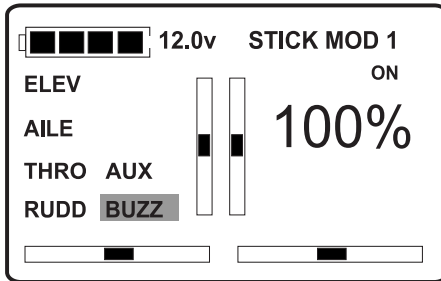
Press ENT to enter the setting status, and both ELEV and the current reverse status NOR or REV are flashing. Press UP or DN to flash RUDD. RUDD and its current reverse status NOR or REV are together flashing. Press R or L to let NOR flashing. Press ENT to confirm, and then press EXT to exit .



5.1.3 Buzzer setup

The buzzer setup includes two status: ON or OFF. Below is the setting method:

Press ENT to enter the setting status, and both ELEV and the current reverse status NOR or REV are flashing. Press UP or DN to flash BUZZ. BUZZ and its current switch status ON or OFF are together flashing. If want to change the switch status, press R or L to make ON flashing, and then press ENT to confirm and save. Press EXT to exit.



5.2 DEVO-6/7/8S/10/12S(optional radio)settings

5.2.1 Type:Helicopter

5.2.2 Swash type:1 Servo Normal

5.2.3 Device Output

DEVO-6		
Gear	FMOD SW	Active
Pitch	System	Active

DEVO-7		
GEAR	GEAR	ACT
AUX2	FMD	ACT

DEVO-8S		
Gear	GEAR SW	Active
Pitch	System	Active
AUX2	FMOD SW	Active
AUX3	RUDD D/R	Active

DEVO-10		
Gear	GEAR SW	Active
AUX2	FMOD SW	Active
AUX3	RUDD D/R	Active
AUX4	AUX4 KB	Active
AUX5	AUX5 KB	Active

DEVO-12S		
Gear	GEAR SW	Active
Pitch	System	Active
AUX2	FMOD SW	Active
AUX3	AUX3 Lever	Active
AUX4	AUX4 Lever	Active
AUX5	AUX5 Lever	Active
AUX6	AUX6 Knob	Active
AUX7	AUX7 Knob	Active

5.2.4 Reverse switch settings

DEVO-6	
Elevator	Normal
Aileron	Normal
Throttle	Normal
Rudder	Normal
Gear	Normal
Pitch	Normal

DEVO-7	
ELEV	NORM
AILE	NORM
THRO	NORM
RUDD	NORM
GEAR	NORM
PITCH	NORM
AUX2	NORM

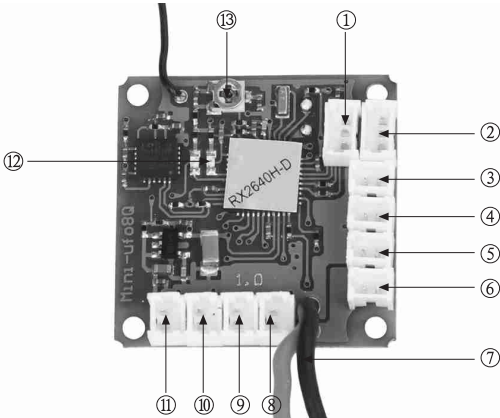
DEVO-8S	
Elevator	Normal
Aileron	Normal
Throttle	Normal
Rudder	Normal
Gear	Normal
Pitch	Normal
AUX2	Normal
AUX3	Normal

DEVO-10	
Elevator	Normal
Aileron	Normal
Throttle	Normal
Rudder	Normal
Gear	Normal
Pitch	Normal
AUX2	Normal
AUX3	Normal
AUX4	Normal
AUX5	Normal

DEVO-12S	
Elevator	Normal
Aileron	Normal
Throttle	Normal
Rudder	Normal
Gear	Normal
Pitch	Normal
AUX2	Normal
AUX3	Normal
AUX4	Normal
AUX5	Normal
AUX6	Normal
AUX7	Normal

6.1 RX2640H-D receiver features

- (1) Receiver RX2640H-D adopts 2.4G spread spectrum technology with the functions of automatic scanning, code pairing and LED receiving indication.
- (2) The usage of 6-Axis gyro and Intergration design of the flight status control ,ensures the precise location of the flight performance.



05

Transmitter
setup



06

Setup of the
RX2640H-D
receiver



06

Setup of the RX2640H-D receiver

6.2 Function of receiver

S/N	Name for short	Full name	Function
1	Upgrade channel one	Upgrade spare or plug in the bind plug to clearance the ID memory.	The bind plug face towards left.
2	Upgrade channel two	Upgrade spare or connect to the DC wire.	The bind plug face towards left.
3	Right front motor ^A	Connect to the right front motor ^A wire.	The bind plug face towards front.
4	Right motor ^B	Connect to the right motor ^B wire.	The bind plug face towards front.
5	Right back motor ^C	Connect to the right back motor ^C wire.	The bind plug face towards front.
6	Back motor ^D	connect to the back motor ^D wire.	The bind plug face towards front.
7	Power wire	Connect to the lipo battery.	
8	Left back motor ^E	Connect to the left back motor ^E wire.	The bind plug face towards right.
9	Left motor ^F	connect to the left motor ^F wire.	The bind plug face towards right.
10	Left front motor ^G	Connect to the left front motor ^G wire.	The bind plug face towards right.
11	Front motor ^H	Connect to the front motor ^H wire.	The bind plug face towards right.
12	Signal indicator light	Show the bind status.	
13	Gyro sensitivity adjust knob	Adjust the gyro sensitivity of the front/back /left/right /Rudder.	

6.3 Flight Modes switches of the Receiver

(1) Standard Transmitter: 2402D

Note:Please strictly refer to below operations.

- (1.1) Push the throttle stick to the top position, turn on the radio and connect the UFO battery , then enters the code pairing status.The receiver indicator will flash between red and green alternately after code pairing successfully. That's the Flight Modes switch status.
- (1.2) Under the Flight Mode switch status, pull and push the Elevator stick up and down four times or above to enter Flight Modes switch (finish in 2 seconds).It is in Normal Flight mode when the red indicator turns solid, and it's in Roll Flight mode when the green indicator turns solid.
- (1.3) After choose the Flight Mode, pull the throttle stick at the lowest position,then flight available.

(2) DEVO-6/7/8S/10/12S Transmitter selectable

Note: Please set the FMOD switch as "ACTIVE" in the Output setting of Transmitter.

When the FMOD switch of the radio at "0" position, the receiver's red indicator turns solid as the Normal Flight mode; When the FMOD switch of the radio at "2" position,the receiver's green indicator turns solid as the Roll flight mode.

6.4 Adjustment of receiver

- (1) Receiver LED indicator:Quick flashing indicates the reception of signal; a solid light means connection is completed successfully; slow flashing indicates fail to receive signal, please disconnect and connect the battery again.
- (2) Adjust knob of the gyro: CW rotating increase the sensitivity of the Gyro,CCW rotating decrease the sensitivity of the Gyro. The default setting is Middle,generally there is no need to trim.
- (3) Clear fix ID in receiver: Insert plug terminal into upgrade channel 1 of the receiver to clear fix ID memory and disconnect plug terminal when the indicator of the receiver start to flash.
- (4) Receiver upgrade: Plug the three colored cable (**black, red and blue**) into upgrade channel 1 and plug the three colored cable (**black, red and yellow**) into upgrade channel 2 (fixed ID may clear after upgrading).

6.5 Matters needing attention

- (1) All the wires should be connected in a correct way. Misconnection will result in failure to receive signal, even damage to receiver speed controller.
- (2) Please use special adjustment pen to rotate the gyro turning knob in order to avoid damaging the knob.

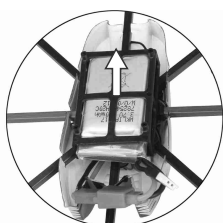
- (1) GA006 is suitable for 1 cell (3.7V) Li-ion or Li-polymer battery and can charge 2 pieces of batteries maximum at the same time.
- (2) Please plug the pin of your battery into the jack of the GA006 first and then connect to the power. Otherwise, the LED may not become red and the voltage may be higher than 3.8V. You need to disconnect the USB power supply and reconnect it.
- (3) When USB power supply is well connected and battery is charging, the LED will become red. After your battery is full charged, the LED will not become red.

8.1 Installation of battery pack

Install the battery to the pack.

8.2 Turn on the power

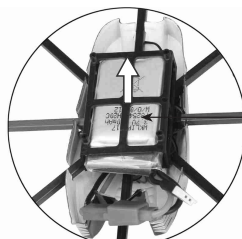
8.2.1 Turn on the power



1. Install the battery pack in the battery compartment.



3. Pull down the throttle stick and throttle trim of transmitter to the lowest position, and then move the elevator trim, aileron trim, and rudder trim at the neutral positions, respectively.

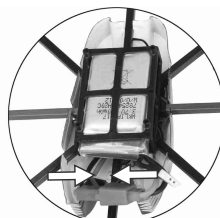


Battery pack location

Diagram of battery installation.



2. Turn on the power of transmitter.



4. Connect the power cable of UFO to receive signal from transmitter.

8.2.2 Matters needing attention

- (1) Please follow this rules: "Open the radio first ,connect the QR SPACEWALKER power last". After open the radio power button ,please connect the QR SPACEWALKER power in 10S, the signal indicator light begins flashing, the light will be solid after 1~3 seconds.After binding with the radio, the indicator light starts flashing again. If the indicator light turns solid, then the receiver has received the signal of the radio successfully, binding finished.
- (2) If more than 10 seconds passed before the power cable was connected binding will fail. When binding fails, disconnect the battery, turn off the transmitter and repeat step (1).

8.2.3 Trouble shooting a flashing receiver LED after connecting the power cable

Possible causes	Solutions
Code pairing failed.	Turn transmitter off then on and re-connect UFO power cable.
The throttle trim and throttle stick of transmitter are not at the lowest position.	Pull down the throttle trim and throttle stick to the lowest position and re-code pair.
The transmitter battery is low or empty.	Replace transmitter battery and re-code pair (re-bind).
The UFO battery is low or empty.	Replace the UFO battery with a fresh pack and re-code pair.
No function in receiver or transmitter.	Replace faulty receiver or transmitter and re-code pair.



07

Instruction
for GA006
Charger



08

Steps of
flight



09

Flight over



Step 1: disconnect the power cable of QR SPACEWALKER

Step 2: turn off the transmitter.

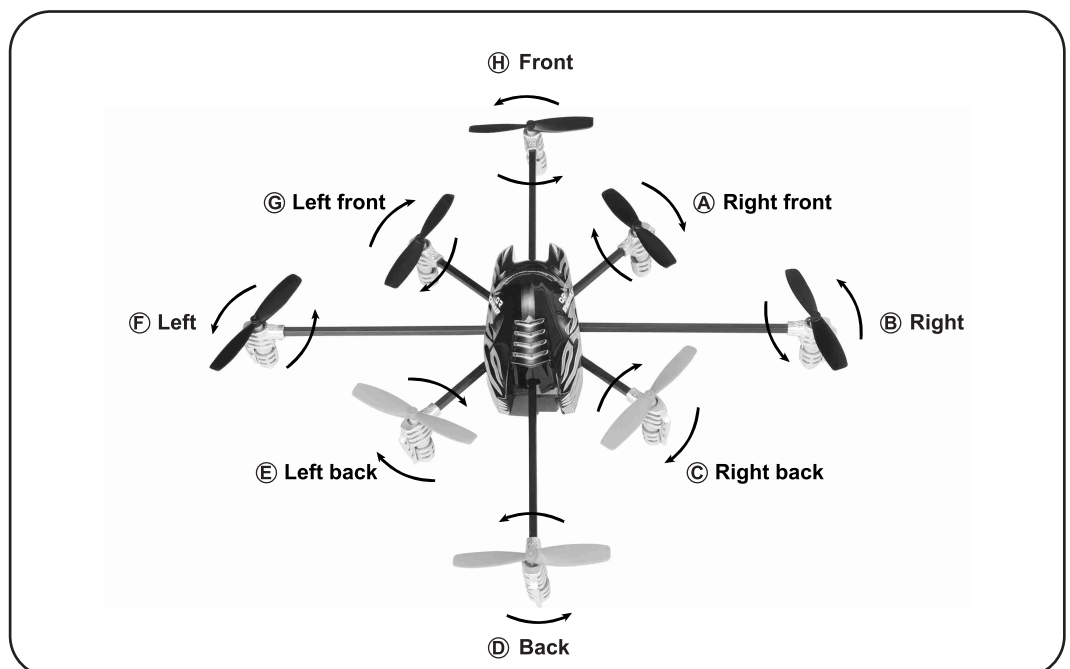
Step 3: Remove the battery pack.



10

Installation and the Instruction before flight

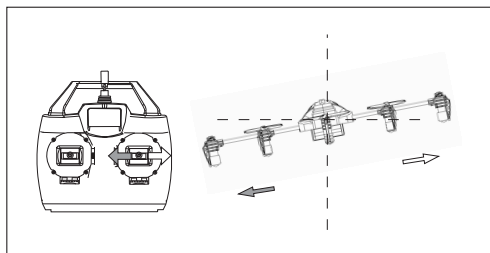
1.The front propellers are in black color while the rear propellers are in Orange or yellow.



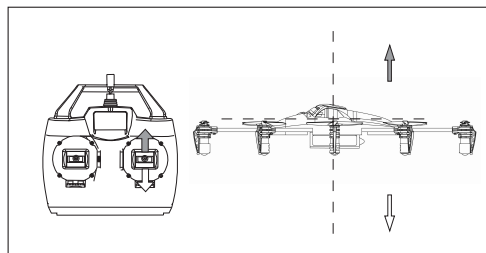
2. After connecting the power of the QR SPACEWALKER, please check the propellers rotation direction, left front/right front/left back/right back propellers rotate CW, front/ back/left/ right propellers rotate CCW.

3. You can adjust the radio trim (except the throttle trim) if the QR SPACEWALKER flight drift.

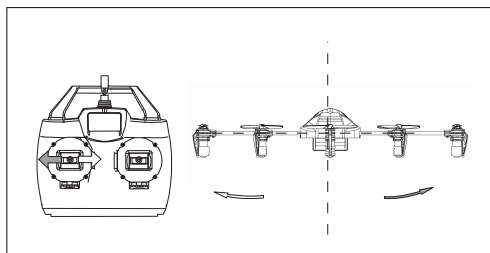
Mode 1 (throttle stick at right hand)



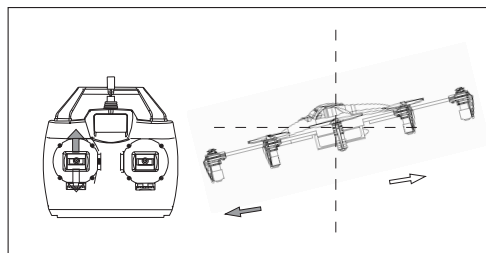
1. When moving the aileron stick left or right, the UFO accordingly flies left or right.



2. When moving the throttle stick up or down, the UFO accordingly flies up or down.

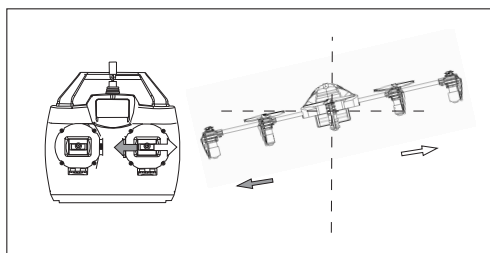


3. When moving the rudder stick left or right, the head of UFO accordingly flies left or right.

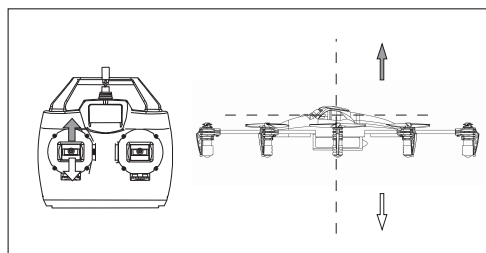


4. When moving the elevator stick up or down, the UFO accordingly flies forward or backward.

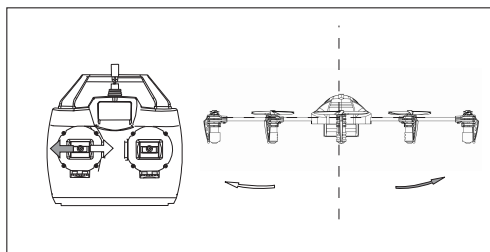
Mode 2 (throttle stick at left hand)



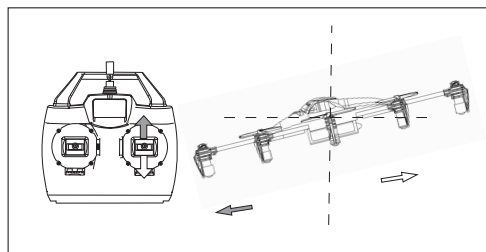
1. When moving the aileron stick left or right, the UFO accordingly flies left or right.



2. When moving the throttle stick up or down, the UFO accordingly flies up or down.



3. When moving the rudder stick left or right, the head of UFO accordingly flies left or right.



4. When moving elevator stick up or down, the UFO accordingly flies forward or backward.

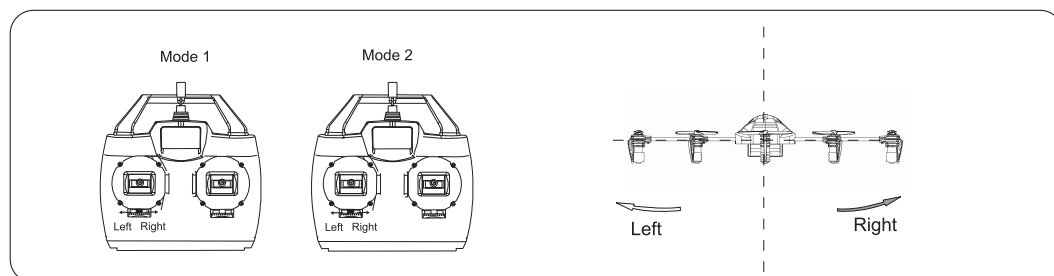


Appendix 1- Flight control



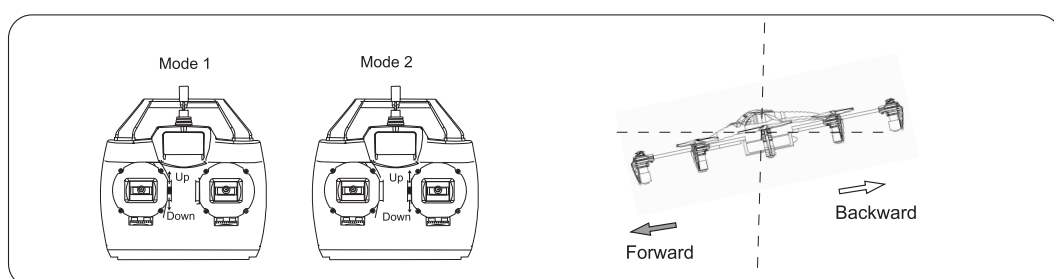
Appendix 2 – Trimming the flight actions

1. Adjust the rudder trim



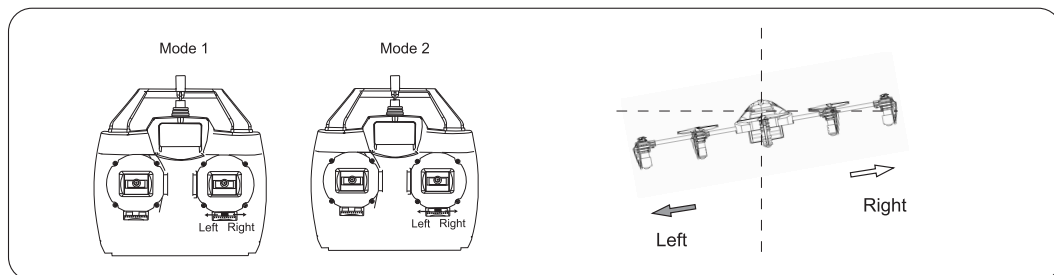
If the head of UFO wants to fly left or right after takeoff or in a hover, use the rudder trim (see above) to correct it. Move the trim left if it flies right, move the trip right if it flies left.

2. Adjust the elevator trim



If the UFO wants to fly forwards or backwards after takeoff or in a hover, use the elevator trim (see above) to correct it. Move the trim down if it flies forwards, move the trip up if it flies backwards.

3. Adjust the aileron trim



If the UFO wants to fly left or right after takeoff or in a hover, use the aileron trim (see above) to correct it. Move the trim left if it flies right, move the trip right if it flies left.

1 Flight practice for the beginner

1.1 Matters needing attention

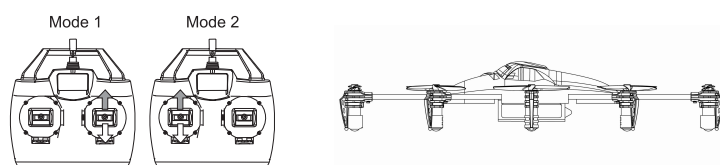
- (1) Beginners should be supervised and guided by skilled pilots when learning.
- (2) For the sake of safety, people should keep at least 5 meters away from the UFO during practice.
- (3) Choose a spacious open ground without people and obstacles as the flight practice field.

1.2 Steps

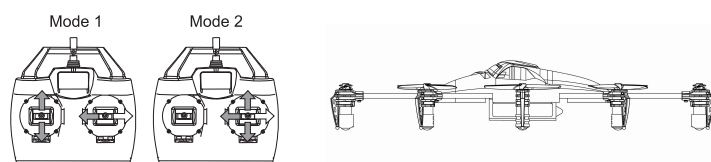
(1) Practicing throttle control - stationary flight

Start by standing directly behind the UFO, tail closest to you and head/nose pointing away. Practice taking off from the ground and then by slowly pulling down on the throttle stick, land it softly and horizontally. Repeat this step until the throttle can be finely and carefully controlled.

When hovering, the tail rotor counteracts torque but also pushes UFO to the left. Don't forget to counteract this effect using cyclic stick to the right and take off slightly inclined. It is important to hover vertically, stabilize UFO at 1.5m height and then land it.

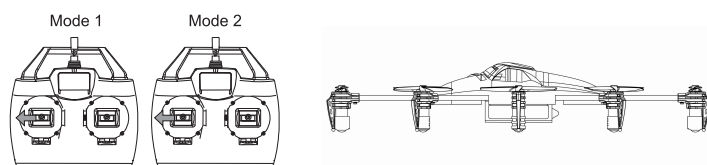


(2) Practice of aileron and elevator control



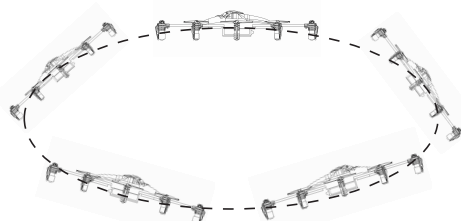
First increase throttle and enter a stable hover as practiced in the previous section. Next, use the elevator and aileron sticks to purposely fly the UFO in a 'cross pattern' forwards, backwards, to the left and to the right. In between each direction, return to hover over the take off point. Continue to repeat this step until it can be completed with ease.

(3) Practicing rudder control



Enter a stable hover as practiced in step one, then practice rotating the head of the UFO to face left then back to face right and back to face forwards (away from the pilot). Start with a rotation angle of 30 degrees or less and gradually increase it as you become more comfortable and more experienced.

(4) Practicing circular flight



After mastering steps (1) to (3) with ease, please draw or mark a large circle on the ground. Fly your UFO along this circular track until the flight is smooth and controlled.

You may wish to stand inside the circle at first to practice circular flight before needing to control the nose in orientation. Fly circles in both directions and at a constant altitude to be comfortable with this step.



Appendix 3 – Flight practice

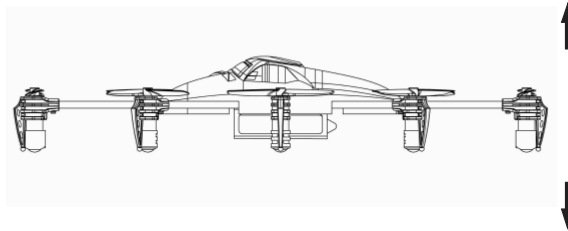


Appendix 3 – Flight practice

2 Advanced practice

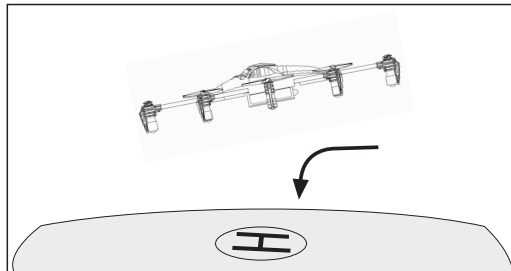
2.1 Frog-hopping practice

Repeat the take off and landing action using the throttle stick whilst maintaining a vertical path. Increase your rate of ascent and descent gradually as you become more comfortable with the exercise. Be sure to slow down in time when landing!



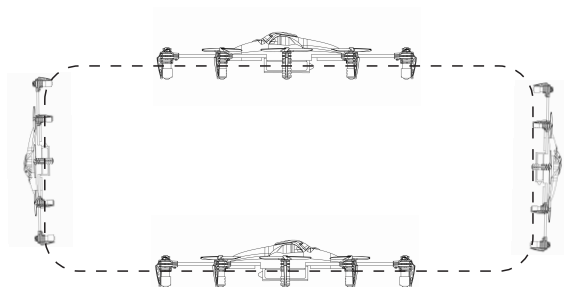
2.2 Practicing controlled take off and landing

Mark out an area on the ground as a landing pad to help practice deliberately taking off and landing from a set location. The process of take off and landing should be kept stable and as close to vertical as possible.



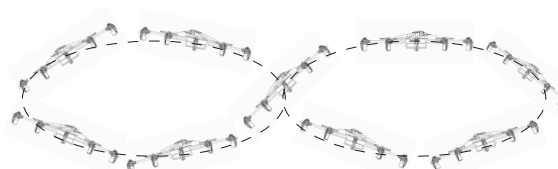
2.3 Practicing square flight

Take the take off point as the center to draw a square whose side length is about 2 meters. Fly your UFO along the 4 sides and keep the flight height parallel to the line of sight. Make a 90 degree rotation at each corner of the quadrangle to adjust the flight direction. Train your straight flight skills and 90 degree flight course control. Fly in both directions around the circuit until familiar with the maneuver.



2.4 Figure eight practice

Once you have mastered the previous steps you can try flying smooth flat figure eights. Try to maintain the same altitude during the entire flight path. Take care when flying where there is wind as it may cause the UFO to suddenly rise or fall unexpectedly.



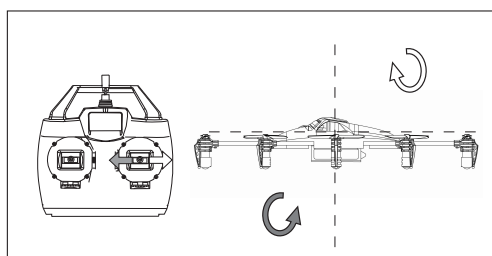
2.5 Roll flight practice

QR SPACEWALKER can finish excited stunts actions,such as the front and back, right and left rolls.

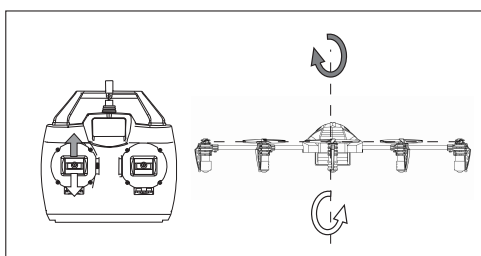
Matters need to be attention when the first flight:

- (1) Choose a spacious ground with soft grass to practice.
- (2) Select roll flight mode.
- (3) Advise beginner to increase servo distance of ELEV and AILE of the transmitter to 100%~110%. And can adjust according to personal skill level. The default setting is 100%.
- (4) Practice of throttle stick: when UFO roll from normal status, the throttle stick need to be pulled down slowly; Push up the throttle when it exchange normal status to roll. Please adjust according to personal skill level.

Mode 1 (throttle stick at right hand)

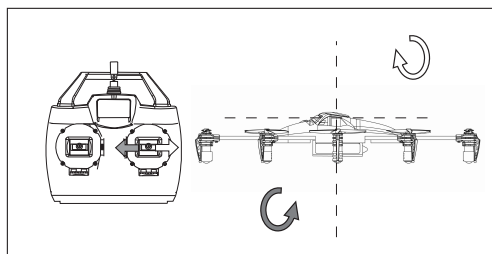


1. When moving the aileron stick left or right, the UFO accordingly rolls left or right.

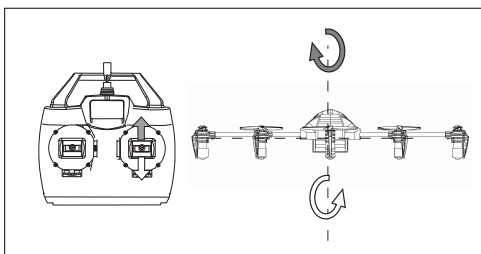


2. When moving the elevator stick up or down, the UFO accordingly rolls forward or backward.

Mode 2 (throttle stick at left hand)



1. When moving the aileron stick left or right, the UFO accordingly rolls left or right.



2. When moving the elevator stick up or down, the UFO accordingly rolls forward or backward.



Appendix 3 – Flight practice

The specifications of the R/C aircraft
may be altered without notice.



Add.: Taishi Industrial Park, Dongchong Town
Panyu District, 511475 Guangzhou

Tel.: (8620) 8491 5115 8491 5116

Fax.: (8620) 8491 5117

Web: www.walkera.com

Email: heli@walkera.com
info@walkera.com