User Manual

Remote Controller

ESKY008083

Esky

FCC ID: 2AVDQ-ESKY008083

Shenzhen Zonda Hobby Co.,Ltd
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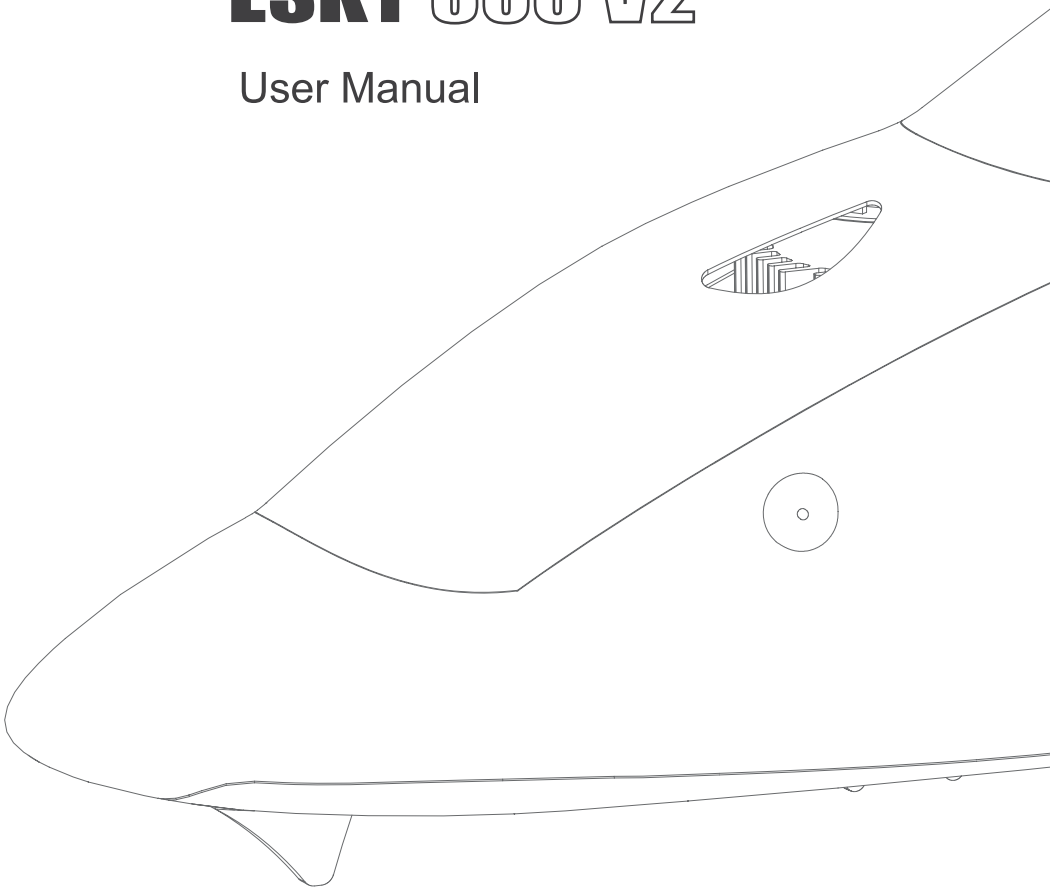
CC3D
INSIDE

ESKY 300 V2

User Manual



E_sky®

Safety Precautions and Warnings

EN

RC helicopter is controlled by radio signals. It may be interfered by other radio signals during operation. These interference may cause the helicopter lose control.

Warning

1. Improper operation to ESKY 300 V2 may lead to damage or loss. It is prohibited for children under 14 years to operate this product.
2. Keep it away from high temperature environment for storage and flight.
3. Suggested operation temperature: 5-35°C , Humidity: 20-80%.
4. Keep away from fan, air conditioner, table light while flying.
5. Do not contact the motor in case of damage or injury.

Prohibition

1. Keep away from crowds in case of accidents.
2. Do not operate ESKY 300 V2 in shower room or under rain. Moisture may go inside the helicopter which may cause electronic parts malfunction and unexpected incident.
3. Do not re-equip, upgrade or repair your helicopter with unauthorized parts.
4. Keep people and objects away from the spinning unit and parts in case of damage or injury.

FCC ID: 2AVDQ-ESKY008083
Made in China
This device complies with part 15 of the FCC rules and industry Canada license-exempt RSS standard(s).
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.

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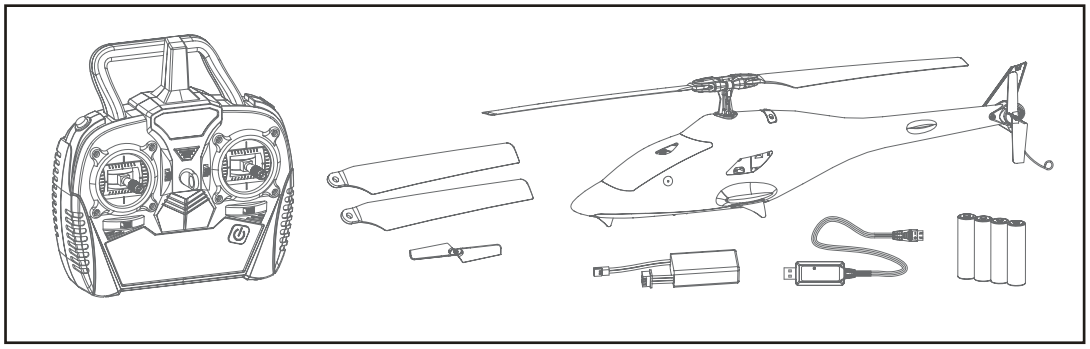
Specifications

Length	310mm	Tail Rotor Diameter	59mm
Height	88mm	Flying Weight	118g
Main Rotor Diameter	321mm	Flight Time	5 Minutes

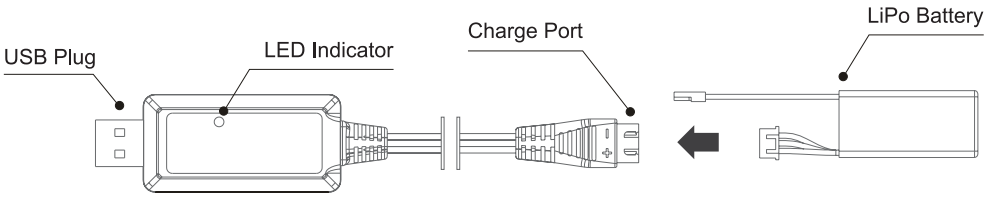
Box Contents

1 x ESKY 300 V2 Helicopter
1 x 320mAh 2S 7.4V Li-Po Battery
1 x USB 2S Li-Po Charger
1 x 2.4GHz Transmitter
4 x AA Batteries
2 x Main Blade, 1 x Tail Blade



Battery Charging

1) Insert the 7.4V 2S LiPo Battery into the charger and insert the charger into the USB port or a USB power supply.
2) The LED on the charger glows solid red and blinking green, indicating charging has begun.
3) When the LiPo Battery is fully charged, the LED glows solid red and solid green.

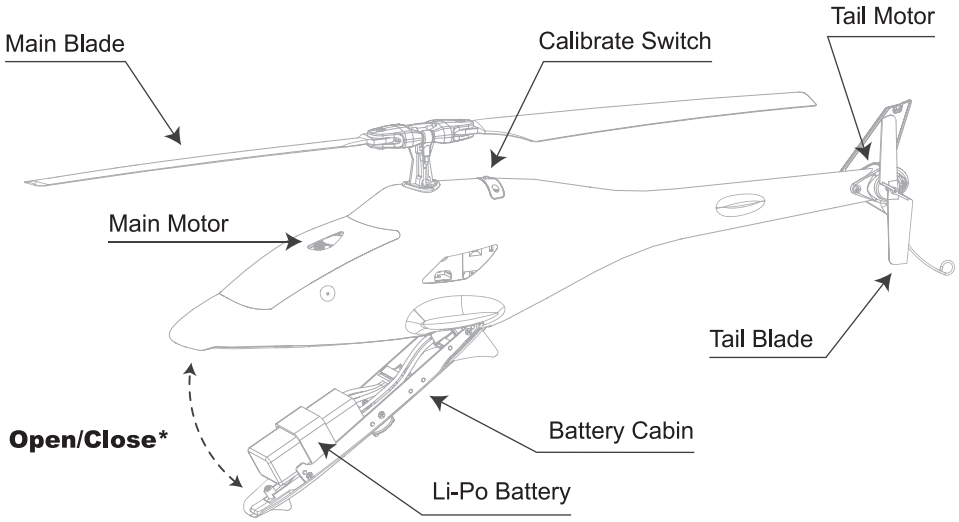


Red Solid and Green Blinking LED: Charging
Red and Green Solid LED: Charging Complete
Red Solid LED: Power Connected (Stand By)
Red Blinking LED Only: Battery Error
Red and Green Blinking LED: Charger Error
Red Blinking and Green Solid LED: Input (V) too high

Flying Checklist

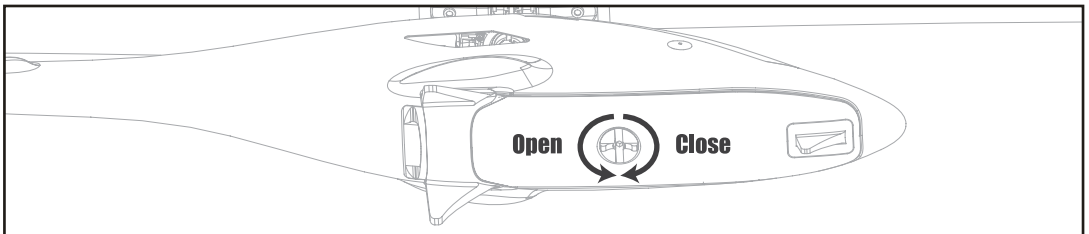
- ☐ **Always turn the transmitter on first.** Set the THROTTLE CUT switch on the transmitter to the RED DOT position then set the CAILBRATE switch on the helicopter to the RED DOT position
- ☐ **Plug the flight battery into the helicopter**
- ☐ **Set the CAILBRATE switch on the helicopter to the GREEN DOT position and place the helicopter on a level surface.** Allow the helicopter to initialize (Initialization time is about 10 seconds, initialize successfully until the LED Indicator in the helicopter from blue flashes rapidly to blue flashes slowly)
- ☐ **Lower the throttle stick to the lowest position in the transmitter and set the THROTTLE CUT switch on the transmitter to the GREEN DOT position**
- ☐ **Fly the helicopter**
- ☐ **Green LED indicator on the helicopter being from solid to flashes slowly, indicating the flight battery voltage is low, land the helicopter.** Set the THROTTLE CUT switch on the transmitter to the RED DOT position, unplug the flight battery into the helicopter then turn the transmitter off last

Helicopter Parts

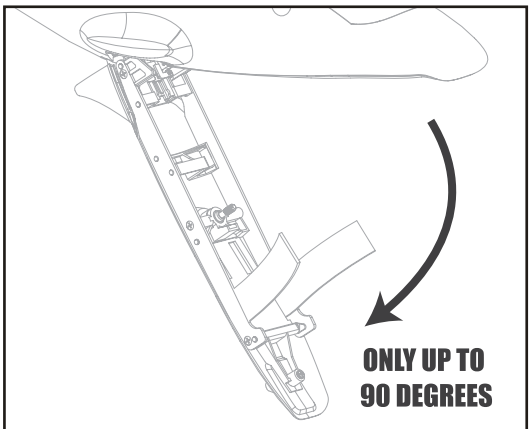


***The opening angle of the battery cabin is only up to 90 degrees**

Installing the Flight Battery

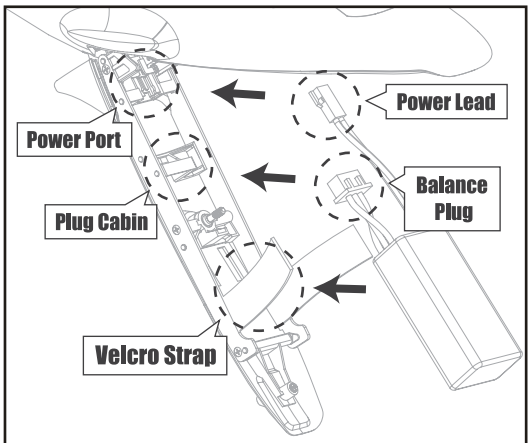


Unscrewing the battery cabin



Caution!

The opening angle
of the battery cabin is only up to 90 degrees



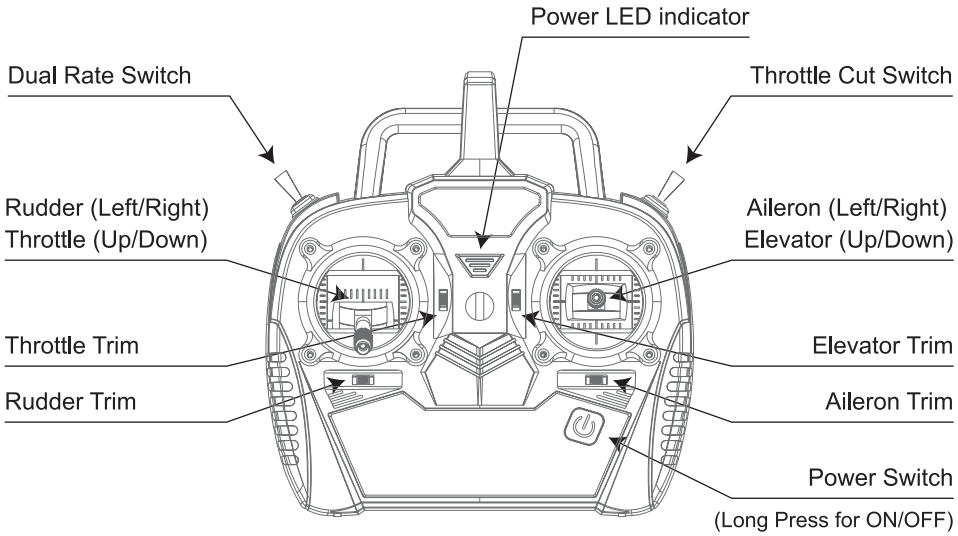
Putting the balance plug into the plug cabin and connecting the power lead to the port next to the balance plug cabin

1. Unscrewing the battery cabin

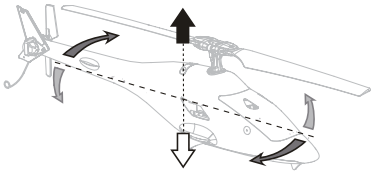
(Caution: the opening angle of the battery cabin is only up to 90 degrees)

2. Installing the battery and fixing the battery with the velcro strap
3. Putting the balance plug into the plug cabin
4. Connecting the power lead to the port next to the balance plug cabin
5. Screwing in the battery cabin after closing it

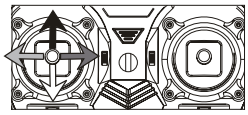
Transmitter Control - Left hand throttle transmitter Mode 2



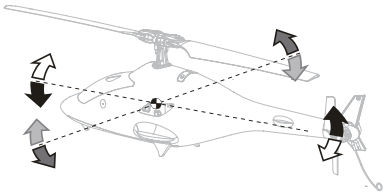
Understanding the Primary Flight Controls Mode 2



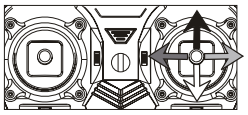
Mode 2



When pushing the “Left Stick” up or down, the helicopter lift up or descend accordingly; This procedure is Throttle control.
When pushing the “Left Stick” left or right, the head of the helicopter turns left or right accordingly; This procedure is Rudder control.

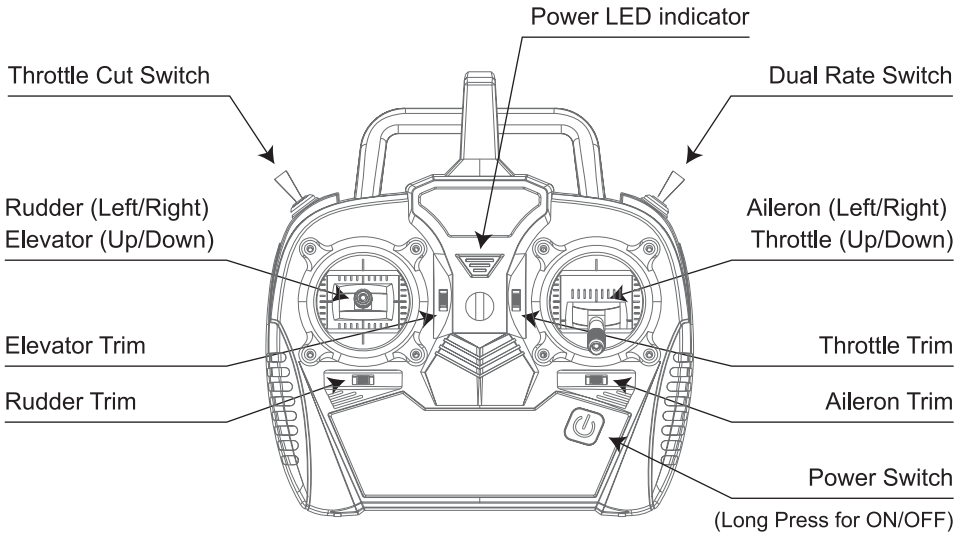


Mode 2

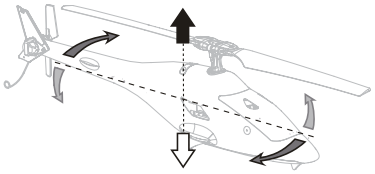


When pushing the “Right Stick” up or down, the helicopter moves forward or backward accordingly; This procedure is Elevator control.
When pushing the “Right Stick” left or right, the helicopter tilts left or right accordingly; This procedure is Aileron control.

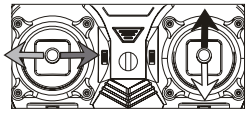
Transmitter Control - Right hand throttle transmitter Mode 1



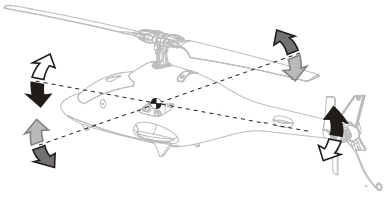
Understanding the Primary Flight Controls Mode 1



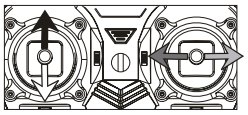
Mode 1



When pushing the “Right Stick” up or down, the helicopter lift up or descend accordingly; This procedure is Throttle control.
When pushing the “Left Stick” left or right, the head of the helicopter turns left or right accordingly; This procedure is Rudder control.



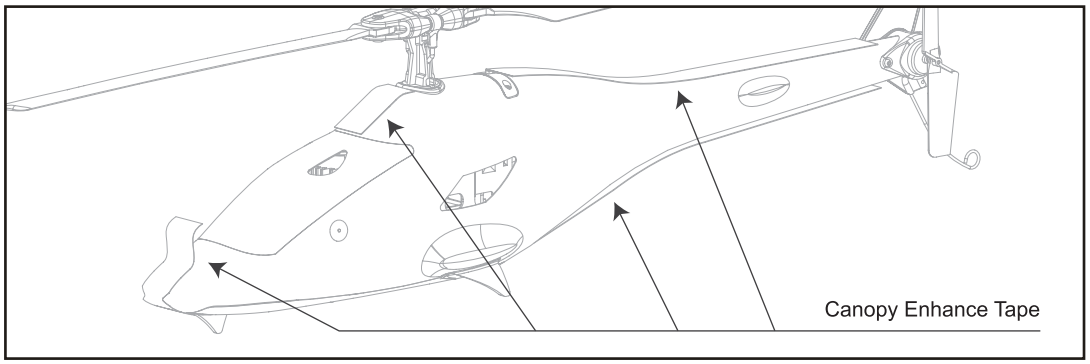
Mode 1



When pushing the “Left Stick” up or down, the helicopter moves forward or backward accordingly; This procedure is Elevator control.
When pushing the “Right Stick” left or right, the helicopter tilts left ot right accordingly; This procedure is Aileron control.

Canopy Enhance Tape

The canopy is a fragile parts, a spare Enhance Tape is inside the box for repairing when the canopy cracked. Applying the Enhance Tape to the place where the canopy is bonded as the diagram.
Applying the Enhance Tape before usage, it can strengthen the canopy and reduce the destructiveness.



Throttle Cut

Throttle Cut is used to turn off the motor quickly if the helicopter is out of control. The motor will out of throttle control and stop spinning when Throttle Cut is activated (switch in red dot position), the motor will control by throttle and continue to spin when Throttle Cut is deactivate (switch in green dot position). For safety, set the Throttle Cut in red dot position any time you need to touch the helicopter or check the direction controls.

Dual Rate Selection

The control sensitivity can be changed by set the Dual Rate switch HI and LO. Factory default setting is Low Rates(LO). When flying with Low Rate(LO) outdoor under windy weather and encounter control difficulty, you can use High Rate(HI).

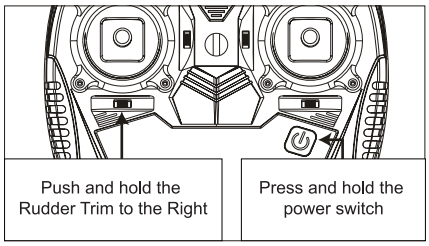
Transmitter and Receiver Binding

1) Power off the transmitter and power on the helicopter, the condition green LED in the helicopter flashes rapidly in a short period of time.

2) Push and hold rudder trim to right and power on the transmitter.

3) When the condition green LED from helicopter is light up which implies the binding is completed, release the rudder trim button.

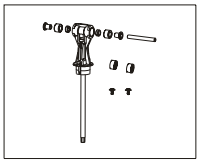
(Helicopter was completely binded in the factory setting.)



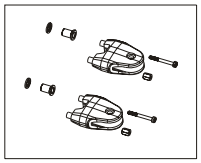
Low Voltage Warning (Transmitter)

The blue power LED indicator flashes slowly when the transmitter battery voltage gets low. Replace the transmitter battery as soon as possible to prevent affecting normal operation.
When the blue power LED indicator flashes slowly with beeps during flight, Land the model and replace the transmitter battery immediately. Failure to do so could result in destruction of the model and possibly bodily injury!

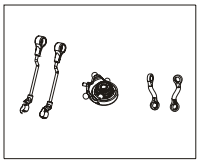
Parts Listing



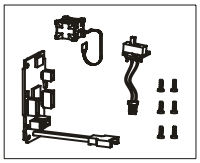
ESKY007996
Main Rotor Housing



ESKY007997
Main Rotor Blade Grip Set



ESKY007998
Swashplate Set



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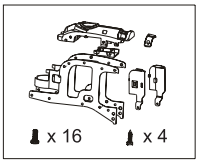
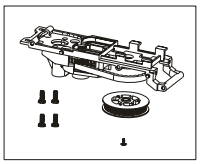
Multi Control Unit



ESKY008000
Main Frame



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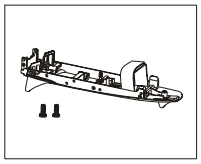
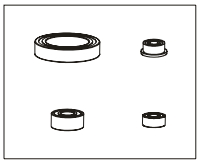
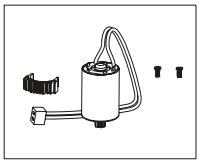
Transmission Component



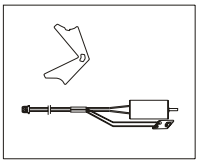
ESKY008002
Battery Cabin



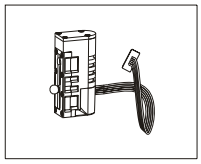
ESKY008003
Bearing Set



ESKY007950
Main Motor



ESKY007951
Tail Motor with LED



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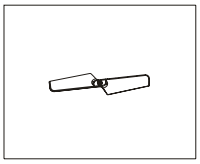
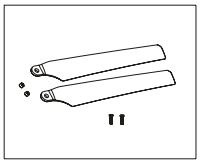
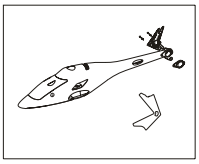
Linear Servo



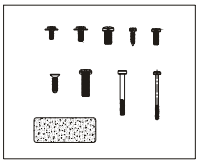
ESKY008005
Tail Blade



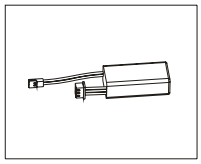
ESKY008006
Main Blade Set



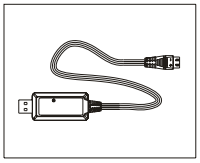
ESKY008007
Fuselage



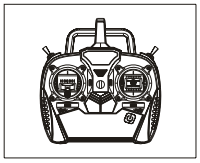
ESKY008008
Screws Set



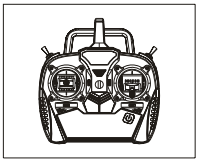
ESKY005867
Li-Po Battery



ESKY005907
USB Charger



ESKY008083
Transmitter (Mode2)



ESKY008083a
Transmitter (Mode1)

Problem: Battery bulge after several flight

Possible Cause: Keep the helicopter spinning when it can no longer be raised or over discharge the battery or long time not in use

(Solution: Replace a new battery)

Problem: Green LED on the helicopter flashes slowly in flight

Possible Cause: LiPo battery low voltage (Solution: Recharge the LiPo battery)

Problem: Green LED on the helicopter flashes rapidly

Possible Cause: Helicopter in Binding Mode (Solution: Power off transmitter and repeat bind process)

Problem: Blue LED on the helicopter flashes rapidly and green LED on the helicopter goes off

Possible Cause: Transmitter do not receive any signal from helicopter (Solution: Rebind or reboot the transmitter)

Problem: Blue LED and green LED on the helicopter goes off

Possible Cause: Battery connection error or battery damaged (Solution: Reconnect the battery or change the new battery)

Problem: Green LED on the helicopter glows solid and blue LED on the helicopter goes off

Possible Cause: Helicopter Calibrate Function not activate (Solution: Set the Calibrate Switch ON in the helicopter)

Problem: Motor do not spin after Initialize successfully but servo works normally

Possible Cause: Throttle Cut Function is activated (Solution: Set the Throttle Cut Switch OFF in the Transmitter)

Problem: Helicopter skewed slightly in flight

Possible Cause: Incorrect trim value (Solution: Maintain the helicopter level flight by adjusting the trim button)

Problem: Helicopter vibrates or shakes in flight

Possible Cause: Main rotor blade grip or main blade bent (Solution: Check them for damage and replace if necessary)

Problem: Helicopter spin rapidly in flight

Possible Cause: Tail blade installation direction was wrong (Solution: reinstall the tail blade with correct installation direction)

Problem: Helicopter skewed heavily in flight

Possible Cause: Servo or linking parts error (Solution: Check each linking parts)

Possible Cause: Helicopter Calibrate Function not activate (switch in red dot position)

(Solution: Set the CAILBRATE switch on the helicopter to the GREEN DOT position and place the helicopter on a level surface)

Possible Cause: Touch the helicopter during Calibrate (Solution: Do not touch the helicopter during the helicopter Calibrate)

Possible Cause: Incorrect trim value in some direction (Solution: Set all the transmitter trim in the middle or neutral position)

Problem: How to judge whether the transmitter trim is in the middle or neutral position?

Possible Cause: / (Solution: The middle or neutral trim position is heard as a longer tone)

FCC Warning:

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.

Any 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.

The device has been evaluated to meet general RF exposure requirement. The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types Remote Controller with model ESKY008083 (FCC ID: 2AVDQ-ESKY008083) has also been tested against this SAR limit. The highest reported SAR values for Max.SAR is 0.03W/kg. This device was tested for typical body operations with the back of the handset kept 0mm from the body. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.