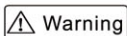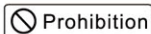# ESKY150X

E_sky® CC3D INSIDE

Safety Precautions and Warnings

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 150X 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℃; Humidity: 20-80%
4. Keep away from fan, air conditioner, table light while flying.
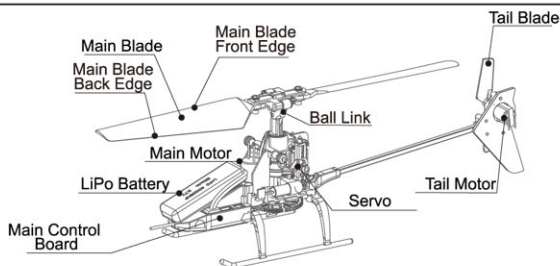5. Do not contact the motor in case of damage or injury.

🚫 Prohibition

1. Keep away from crowds in case of accidents.
2. Do not operate Esky150X 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.

Helicopter Parts

Diagram A

Main Blade
Main Blade Back Edge
Main Blade Front Edge
Tail Blade
Ball Link
Main Motor
LiPo Battery
Tail Motor
Servo
Main Control Board

Flight Operation Procedure

1. Preflight Proceduce

1) Set the **Throttle Stick [Right Stick(Mode1)/Left Stick(Mode2)]** down to bottom and power on the transmitter.

2) Put the helicopter on the ground or flat, power on the helicopter, make sure the helicopter remins flat until the helicopter pass the self-testing.(Condition Blue LED light from quick flashing to slow flashing in the indicator)

3) Safety Unlock:

Mode1

Keep the **Right Stick** down to bottom, then pushing the **Left Stick** to Right for at least 3 seconds and release.(Condition blue LED light from slow flashing to quick flashing in the indicator.)

Mode2

Keep the **Left Stick** down to bottom, then pushing the **Left Stick** to Right Bottom Corner for at least 3 seconds and release.(Condition blue LED light from slow flashing to quick flashing in the indicator.)

4) Take Off : Please take off in 10 seconds, If not, Helicopter will automatically lock.
　　　　Unlock the helicopter by step 3.

2. End Flight Proceduce

1) Power Off the Helicopter
2) Power off the Transmitter

Left Hand Throttle

Right Hand Throttle

Transmitter

1. Transmitter
Left Hand Throttle
(Mode 2)
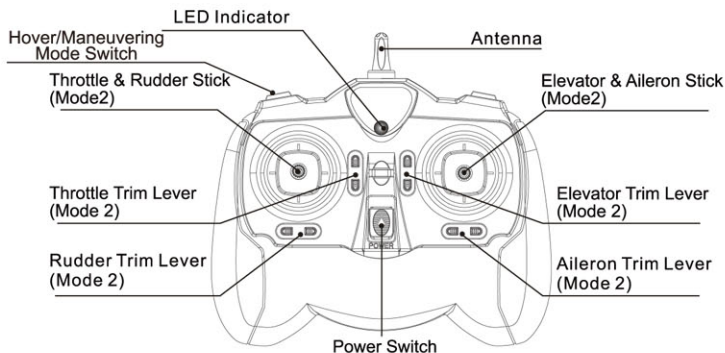
LED Indicator

Hover/Maneuvering
Mode Switch

Throttle & Rudder Stick
(Mode2)

Antenna

Elevator & Aileron Stick
(Mode2)

Throttle Trim Lever
(Mode 2)

Elevator Trim Lever
(Mode 2)

Rudder Trim Lever
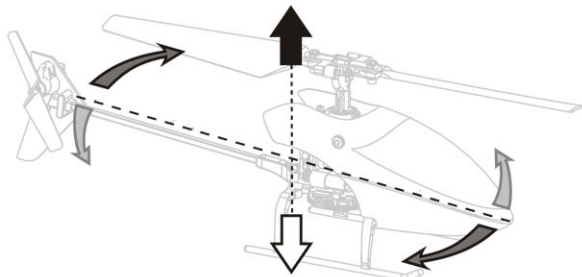(Mode 2)

Aileron Trim Lever
(Mode 2)

Power Switch

P.S. Hover Mode (Press Hover/Maneuvering Mode Switch, "Beep" that Hover Mode).
Maneuvering Mode (Press Hover/Maneuvering Mode Switch, "Beep""Beep" that Maneuvering Mode).
Hover Mode defaulted when turn on the transmitter, it was recommended to landing when switch mode.
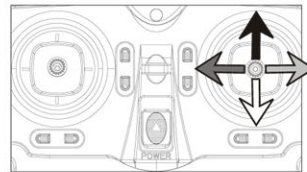
2. Transmitter Control - Mode 2

Mode 2
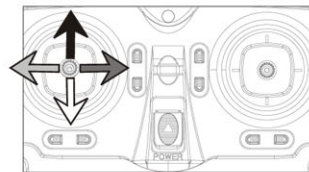
When pushing the THROTTLE & RUDDER stick up or down, the helicopter lifts up or decends accordingly.
When moving the THROTTLE & RUDDER stick left or right, the head of the helicopter moves left or right accordingly.
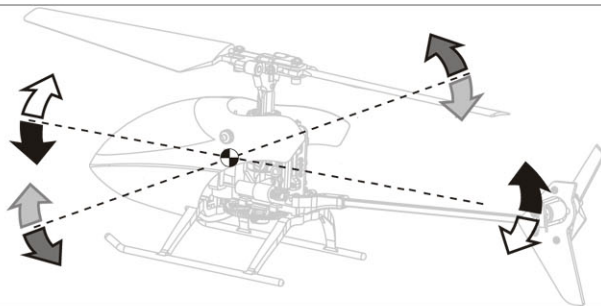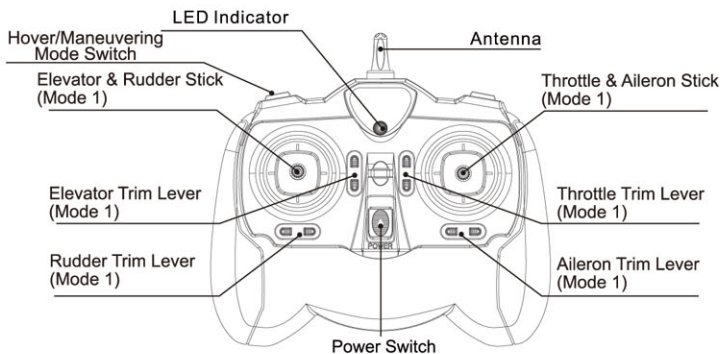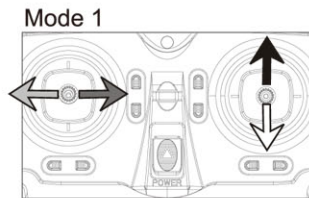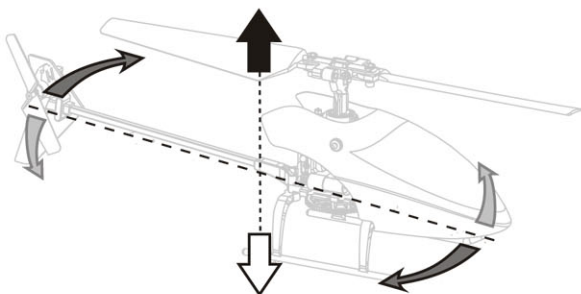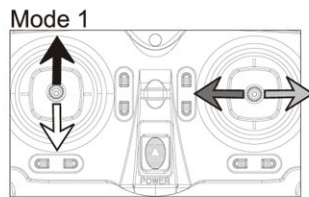
Mode 2

When pushing the ELEVATOR & AILERON stick up or down, the helicopter moves forward or backward accordingly.
When pushing the ELEVATOR & AILERON stick left or right, the head of the helicopter slides left or right accordingly.

Transcriter

3. Transmitter
Right Hand Throttle
(Mode 1)

LED Indicator

Hover/Maneuvering
Mode Switch

Antenna

Elevator & Rudder Stick
(Mode 1)

Throttle & Aileron Stick
(Mode 1)

Elevator Trim Lever
(Mode 1)

Throttle Trim Lever
(Mode 1)

Rudder Trim Lever
(Mode 1)

Aileron Trim Lever
(Mode 1)

Power Switch

P.S. Hover Mode (Press Hover/Maneuvering Mode Switch, "Beep" that Hover Mode).
Maneuvering Mode (Press Hover/Maneuvering Mode Switch, "Beep""Beep" that Maneuvering Mode).
Hover Mode defaulted when turn on the transmitter, it was recommended to landing when switch mode.

4. Transmitter Control - Mode 1

Mode 1

When pushing the THROTTLE & AILERON stick up or down, the helicopter lifts up or decends accordingly.
When moving the ELEVATOR & RUDDER stick left or right, the head of the helicopter moves left or right accordingly.

Mode 1
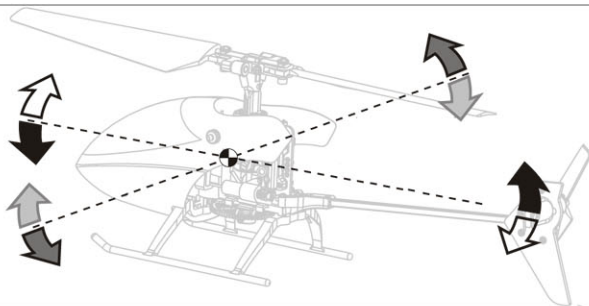
When pushing the ELEVATOR & RUDDER stick up or down, the helicopter moves forward or backward accordingly.
When pushing the THROTTLE & AILERON stick left or right, the head of the helicopter slides left or right accordingly.

Binding

1) Switch off transmitter, switch on helicopter, the condition green LED from helicopter flashes repidly.
2) Press the right button of the rudder trim lever from the transmitter and switch onthe transmitter.
3) When the condition LED from helicopter is extinguished, release the right button until the helicopter's condition green LED relights which implies the binding is completed. (Helicopter was completely binded in the factory setting.)

Right button of the rudder trim lever
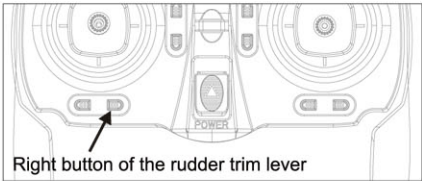
Command Problems FAQ

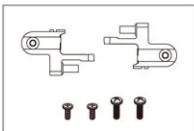| Situation	Reason	Solution
Why the battery bulge before second flight?	Over discharge the battery	Replace a new battery
Why the helicopter not stable when flight?	Due to some parts fixed error	Adjust by trim lever
Why the helicopter green light being slow flash?	LiPo battery low voltage protection	LiPo battery low voltage protection
Why the green light so not solid on the helicopter?	Do not receive any signal	Do not receive any signal
How do I know when a battery is 100% charged?	When the charger light charge from red to green	When the charger light charge from red to green
What is the function of the Dual Rate Button?	To switch the flight mode and sensitive between Tx and Helicopter	
Blades overlapping	Blade deformed	Refer to main blade adjustment
Heavily skewed when flight	Linking parts separated	Check each linking parts
Heavily unstable when flight	Sensor swot analysis mistakes	Reboot the helicopter

P.S. The development of the ESKY 150X would not have been possible without the effort of a large team of individuals who invested in the open source flight controller software that running on the ESKY 150X.

Main Blade Adjustment
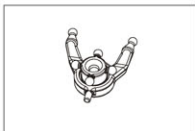
If the helicopter blades overlapping, adjust it as below:

A. Yellow at the Top: Adjust ball link of main blade front edge (Diagram A in P.1) clockwise rotate one time and adjust ball link of main blade back edge counterclockwise rotate one time, until the problem solved.

B. Yellow at the Bottom: Adjust ball link of main blade front edge (Diagram A in P.1) counterclockwise rotate one time and adjust ball link of main blade back edge clockwise rotate one time until the problem solved
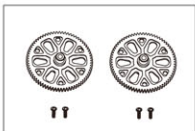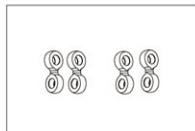
Spare Parts

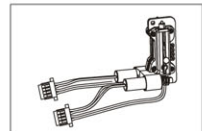| ESKY006310	ESKY006404	ESKY006311	ESKY006406	ESKY006407
Main Rotor Blade Grip Set	Swashplate Set	Main Gear	Ball Link	Servo Set
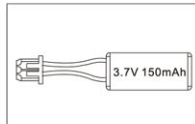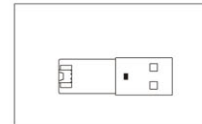
ESKY006408	ESKY005439	ESKY005805	ESKY005435	ESKY006007
Rotor Housing Set	Bearing: 3*6*2	Bearing 5*8*2	LiPo Battery	USB Charger
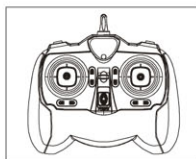
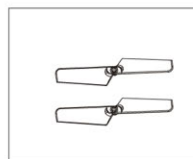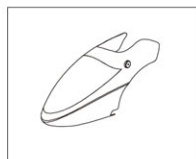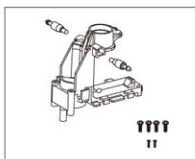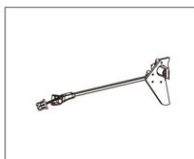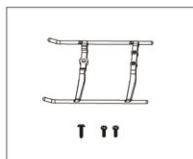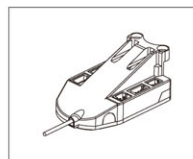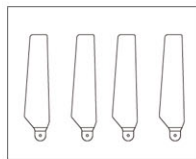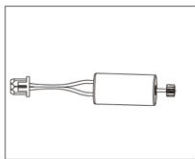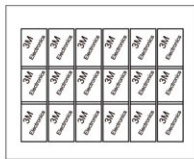|				
ESKY005437 Transmitter(Mode2)	ESKY005437a Transmitter(Mode1)	ESKY006316 Screws Set	ESKY006405 Psuhrod Set	ESKY006403 150X Tail Blade
ESKY006317 Canopy	ESKY006318 Main Frame	ESKY006319 Tail Motor (/w mount)	ESKY006320 Landing Skid Set	ESKY006314 Main Flight Control
ESKY006402 Main Blade	ESKY006313 Main Motor	ESKY007024 Double-sided Stickers		
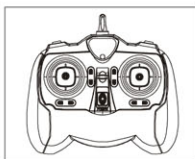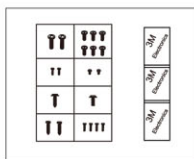
Charging the LiPo Battery by USB Charger

1) Plug the 3.7v LiPo Battery into the USB charger
2) Plug the USB charger into the USB port of computer or charger.
Then there is a solid red light on the USB charger's LED indicator.
3) When the LiPo Battery is fully charged, the red light will change to green light.

LiPo Battery Port

3.7V 150mAh

USB Plug

Signal LED
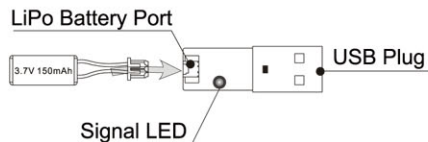
FCC Statement:

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 to an outlet on a circuit different from that to which the   receiver is connected.

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.

Note: Modifications to this product will void the user's authority to operate this equipment.