



Ages 14+
Read the instruction manual carefully



THE HUBSAN X4 PRO

REAL TIME FPV

Hubsan X4 PRO

V1.0 2015.11

Read the instruction manual carefully.

IMPORTANT SAFETY NOTES READING INSTRUCTION

IMPORTANT SAFETY NOTES

OPERATION:

Be carefully when use the X4 Pro. There are subtle electronic components, which will damage if you crash down and broke the X4 Pro or drop in water. Do not use broken X4 Pro, such as X4 Pro with broken propellers, to avoid damage.

Flight:

- Be responsible for you and others safety when you fly X4 Pro
- X4 Pro cannot fly in crowded place, it need enough space to operate.
- Do not fly it in bad weather
- Never try to catch the X4 Pro while it in flight
- Only for age 14+ to play this products
- Always take off the battery after you stop the flight, to avoid injuries when accidently power on the motors
- Always avoid body near the propellers, the flight system will automatically operate after power on no matter the transmitter is power on/ off, the speedy rotation propellers are very dangerous.
- Power off X4 Pro after flight, or the propellers may still rotating to cause injuries.

READING INSTRUCTION

SYMBOL EXPLANATION



No operating



Important Notice



Instruction



Explanation, reference

USAGE ADVICE

Hubsan provides you three files for X4 Pro:

1. "Disclaimer"
2. "Hubsan X4 Pro Instruction Manual"
3. "Ground Station Instruction Manual"


Read the teaching video and Disclaimer firstly, then read the manuals.

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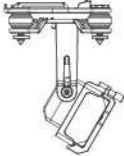





GENERAL INTRODUCTION

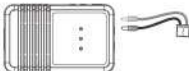




Hubsan X4 Pro is a high-tech middle quad copter, which can display aerial photography. It equipped with high accurate and stable 3 axis gimbal, 1080P HD aerial photography camera, and advanced smart flight control system. High-Integrate Android transmitter can realize long distance camera control, video transmission, grand station auto flight, FPV flight, and social network sharing, etc. functions. Hubsan X4 Pro will help you easily shoot stable HD videos and pictures.

 **FPV:** First Person View, users can feel all the positions when the X4 Pro is flying, provide real experience in flight.

1. ACCESSORIES INCLUDED

Check all the accessories in the package before use.

S/N	Part Name	Photos	Q'ty	Remarks
1	The X4 Pro		1PCS	quipped with GPS, compass and terrestrial magnetism
2	Propellers		8PCS	Propeller A 4pcs, Propeller B 4pcs
3	1 axis stable gimbal		1PCS	1 axis stable gimbal
4	Propeller removal wrench		1PCS	to remove propellers
5	Transmitter		1PCS	FPV Transmitter, equipped with 8 X AA battery(EXCLUDED)
6	Parachute		1PCS	Standalone control system, can protect the X4 Pro's safety after accident crash. (EXCLUDED, need buy from Hubsan)
7	Li-Po battery for X4 Pro		1PCS	inserted in the X4 Pro
8	Adapter		1PCS	110-240V

9	Balance charger		1PCS	use to recharge the Li-Po battery
10	Propeller guard		4PCS	Ensure the safety of the X4 Pro
11	Micro-USB cable		1PCS	To read the camera data
12	User Manuals		4PCS	Disclaimer Hubsan X4 Pro Instruction Manual Camera Instruction Manual Parachute Instruction Manual
13	1080P camera		1 PCS	HD camera module

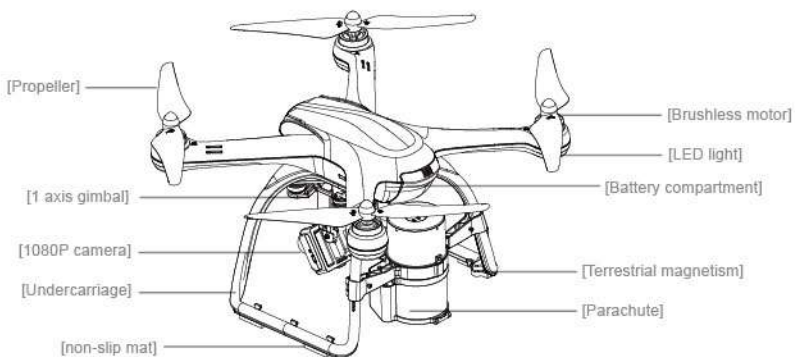
2. INTRODUCTION

The Hubsan X4 Pro consist of quad copter, camera, gimbal, parachute, propeller guard, power system, flight control system, and radio transmission system.

Transmitter equipment: dual data transmission, map and track display, waypoints set/ auto-flight, FPV transmitter operate video and picture shooting

X4 Pro equipment: 3 axis gimbal, camera, power system(brushless motors and propellers), parachute, propeller guard

X4 Pro working Mode: Altitude Hold MODE, Fix Position Mode, Waypoint Mode, RTH Mode, Headless Mode





FPV Transmitter, equipped with 8 X AA battery (EXCLUDED)

PREPAR FOR USE

Thanks for buying HUBSAN products.

1 PREPARE THE LI-PO BATTERY

Make sure the following equipment is full powered before use.

EQUIPMENT	SUPPLIED POWER
Camera	3.7 V 650mAh rechargeable Li-Po battery
X4 Pro with gimbal	11.1V 7000mAh rechargeable Li-Po battery
Parachute	3.7 V 380mAh rechargeable Li-Po battery

1.1 LI-PO BATTERY IN THE X4 PRO

The X4 Pro is equipped with a 11.1V, 3 cells, 7000mAh rechargeable Li-Po battery. Always charge the Li-Po battery with Hubsan provided Charger

BATTERY SPECIFICATIONS

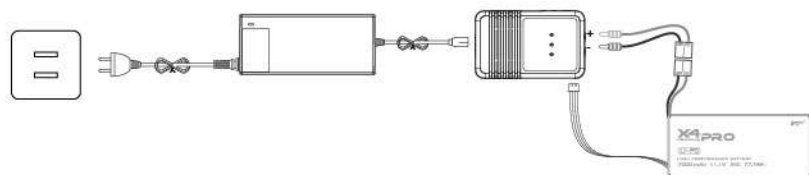
Charging temperature: 0°C~40°C


Discharging temperature: - 20°C~50°C

Charging/ Discharging humidity: < 80%

1.2 CHARGING

Connect battery to balance charger and wall charger, the two LED lights will turn red whilst charging and turn green when charging is finished, charging time is around 180 min.

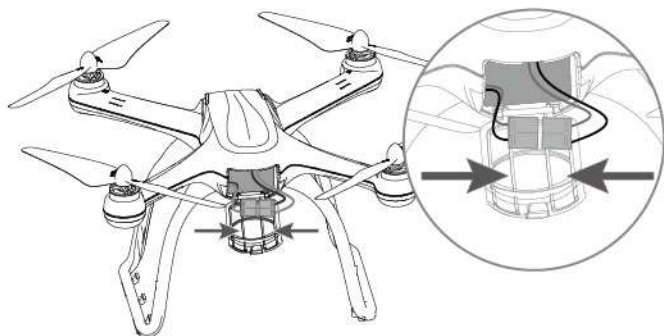


-  (1) **Overcharge protection** Overcharging will damage the battery, charging will stop when the battery charge to 12.8V
- (2) **Over-discharge protection** Over-discharging will damage the battery, the X4 Pro will cut off power when the battery power is 8.4V
- (3) **Short circuit protection** when detect Short circuit protection, the X4 Pro will power off to protect the battery

1.3 POWER ON/ OFF THE X4 PRO LI-PO BATTERY

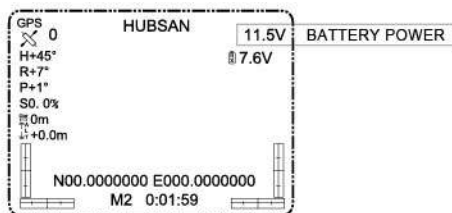
Power on: Put the battery into the battery compartment, connect the battery plug with correct polarity, then the X4 Pro is power on. The LED on X4 Pro will circularly blink blue.

Power off: Disconnect the battery plug, the X4 Pro is power off, the LED will turn off.



1.4 CHECK THE LI-PO BATTERY POWER

After the X4 Pro and the Transmitter finish pairing, the battery power will display on the screen.



Always partially charge your lipo battery before storage

LiPo batteries retain a charge over a reasonable period; It is not normally necessary to recharge stored LiPo batteries unless stored for periods longer than 3-6 months.

If your LiPo battery has been over-discharged, it will not be possible to recharge it again.



LiPo Battery Disposal & Recycling



Lithium-Polymer(LiPo) batteries must not be placed in with household trash. Please contact your environmental or waste agency or the supplier of your model for local regulations and the location of your nearest LiPo battery recycling center.

2 SAFETY NOTES

2.1 IMPORTANT NOTES

This X4 Pro is not a toy. Any improper use of this product will result in serious injury. Be aware of your personal safety, safety to others and your surrounding environment.

We recommend beginners learn to fly with more experienced pilots playing nearby before attempting to fly the X4 Pro for the first time.

2.2 LI-PO BATTERY SAFETY NOTES

The X4 Pro is powered by a lithium-polymer(Li-Po) battery. To avoid risk of fire or damage, never recharge your battery while it is inserted in the plane. If you do not plan to fly the plane for a week or more, store the battery approximately 50% charged to maintain battery performance and life.



SAFETY ADVISORY NOTICE

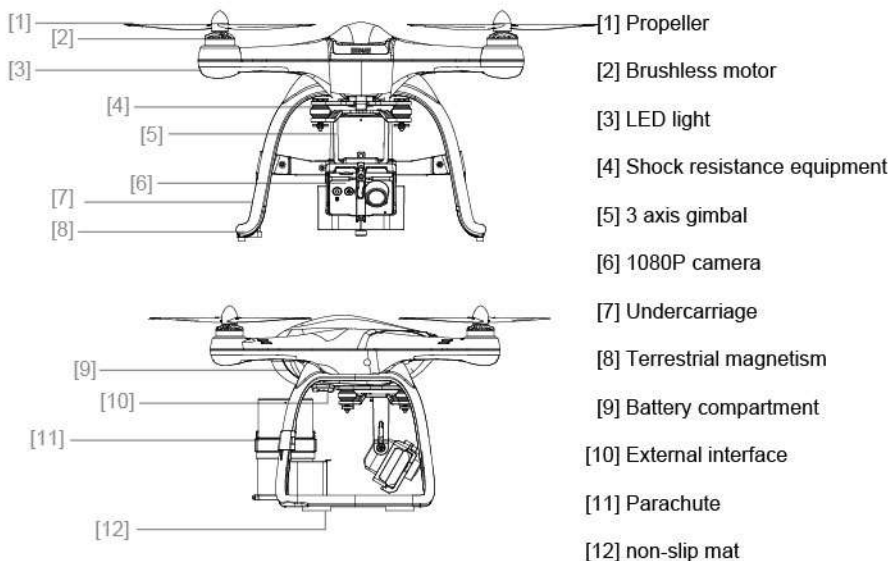
Lithium-Polymer (LiPo) Batteries

LiPo batteries are different from conventional batteries in that their chemical contents are encased in a relatively lightweight foil packaging. This has the advantage of significantly reducing their weight, but does make them more susceptible to damage if roughly or inappropriately handled. As with all batteries, there is a risk of fire or explosion if safety practices are ignored:

- Charge and store LiPo batteries in a location where a battery fire or explosion (including smoke hazard) will not endanger life or property.
- Keep LiPo batteries away from children and animals.
- Never charge the LiPo battery that has ballooned or swelled .
- Never charge the LiPo battery that has been punctured or damaged.
- After a crash, inspect the battery pack for the sign of damage. Discard in accordance with your country's recycling laws.
- Never charge the LiPo battery in a moving vehicle.
- Never overcharge the LiPo battery.
- Never leave the LiPo battery unattended during recharging.
- Do not charge LiPo batteries near flammable materials or liquids.
- Ensure that charging leads are connected correctly. Reverse polarity charging can lead to battery damage or a fire or explosion.
- Have a suitable fire extinguisher (electrical type) OR a large bucket of dry sand near the charging area . Do not try to extinguish electrical (LiPo) battery fires with water.
- Reduce risks from fire/explosion by storing and charging LiPo batteries inside a suitable container.
- Protect your LiPo battery from accidental damage during storage and transportation. (Do not put battery packs in pockets or bags where they can short circuit or can come into contact with sharp or metallic objects.)
- If your LiPo battery is subjected to a shock (such as a crash), place it in a metal container and observe for signs of swelling or heating for at least 30 minutes.
- Do not attempt to disassemble or modify or repair the LiPo battery.

3 PREPARE THE X4 PRO

3.1 INTRODUCTION THE X4 PRO



3.1.1 FLIGHT CONTROL SYSTEM INTRODUCTION

Hubsan X4 Pro is easy to operate and very stable, it support moving forward/backward, left/right, ascending and descending basic flight action, and also support lost control protection, power alarming and IOC functions.

Modules on flight control system	Function
Main control Module	CPU of the flight control system, connect all the modules, central control
IMU Module	Include inertial sensor, which can detect the flying condition; include barometer to measure the flying altitude
GPS & Compass Module	Position hold and Navigation
LED indicating lights	Indicating the flight control system's condition

3.2 PREPARE THE CAMERA

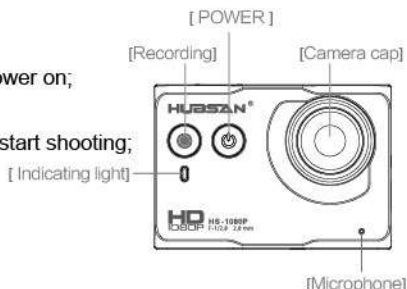
Insert battery into the camera and fix the camera on the gimbal, power on the camera, users can press the buttons on the camera to shooting pictures and videos. Users can also use H7000 transmitter for recording and play back the videos.

Camera specifications			
Recording resolution	1920*1080 Full HD	Battery	3.7V 650mAh
Recording frame rate	30FPS	Working temperature	10 ~ +70°C
Video format	MOV	Working humidity	30% ~ 80%
Image Sensor	3 million pixel MJPG	Working power	1.9W
Image pixel	4032*3024 pixel	Standby power	1.33W
Lens format	1/3"	Storage temperature	- 40 ~ +125°C
Lens FOV	170 ° (MAX)	Storage humidity	30%-90%

3.2.1 CAMERA BUTTONS INSTRUCTION

Power on/off: Press the power button(<2sec), power on;
Hold down the power button(≥2sec), power off.

Video shooting: Press the video button(<2sec), start shooting;
Hold down the video button(≥2sec), shooting stop.



3.2.2 MICRO-SD CARD

Insert the Micro-SD card into the camera before shooting as the Picture 9 shows, always insert/remove the Micro-SD card after power off.

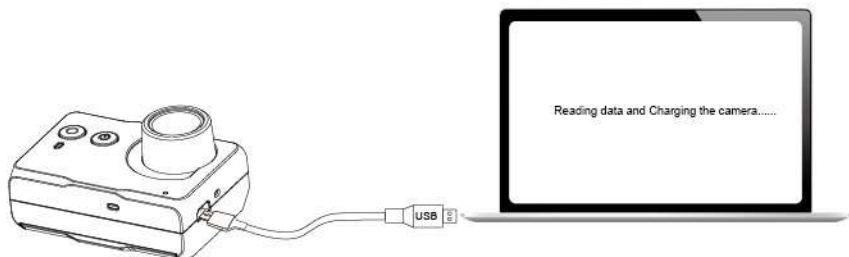
The Micro-SD card is not included in the package, users need prepare brand Micro-SD card(class4-6, over 4GB), support 32GB(MAX) Micro-SD card. Need format the Micro-SD card before use.



- ⊗ Do not insert/ remove the Micro-SD card when the camera power on.
- Format the SD card on the computer first. Need choose 32KB for the size of each allocation unit, or the camera cannot identify the SD card.

3.2.3 READING DATA AND CHARGING THE CAMERA

Use the Micro-USB connect to the PC when the camera is power on, copy the pictures/videos from the camera and charging the camera at the same time.



- ⚠ • Need power on the camera, then copy. The camera is only recharging when it is power off and connect to the PC. The camera cannot shooting when it connect to PC.
- Remove the camera USB connector from the camera when it is shooting, the camera will be still shooting. Other conditions, the camera will be automatically power off if USB connector disconnect the camera.
- The camera will be recharging while connect to the X4 Pro or the PC, charging circuit is about 500mAh, the camera battery is 3.7V/ 670mAh.

3.2.4 CAMERA INDICATING LIGHT

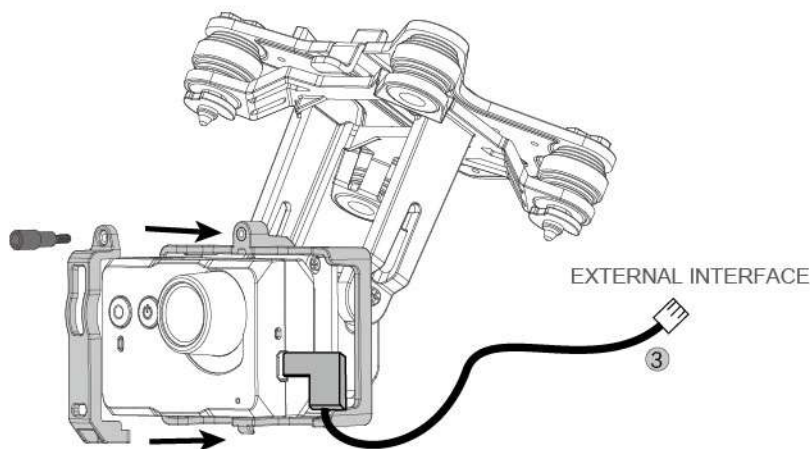
Use the Micro-USB connect to the PC when the camera is power on, copy the pictures/videos from the camera and charging the camera at the same time.

Camera indicating light	Camera condition
Blue light turns on	Standby
Blue light turns on, red light blinks once every second	Recording
Blue light turns on, red light turns on	Camera module is faulty
Blue light blinks every second	Micro-SD card will be full/ no SD card/ faulty SD card
Blue light blinks quickly	Micro-SD card is full
Red light blinks quickly	Battery power is low

2.2.5 INSTALL THE CAMERA

Method: 1. Unscrew the fix set for camera, remove the fix set.

2. Put the camera on the slot(camera facing outside), install the fix set, fix it with screws.
3. Plug the camera data wire into the USB interface, plug the other end into the X4 Pro external interface (see more details on 2.3.1) .



3.3 PREPARE THE 1 AXIS STABLE GIMBAL

Features of the gimbal	
Control accuracy	$\pm 0.03^\circ$
Control range	Pitch angle: $+90^\circ \sim -90^\circ$
Stabilized design	Rotate automatically when the X4 Pro tilted to ensure stable shooting

3.3.1 INSTALL THE 1 AXIS GIMBAL

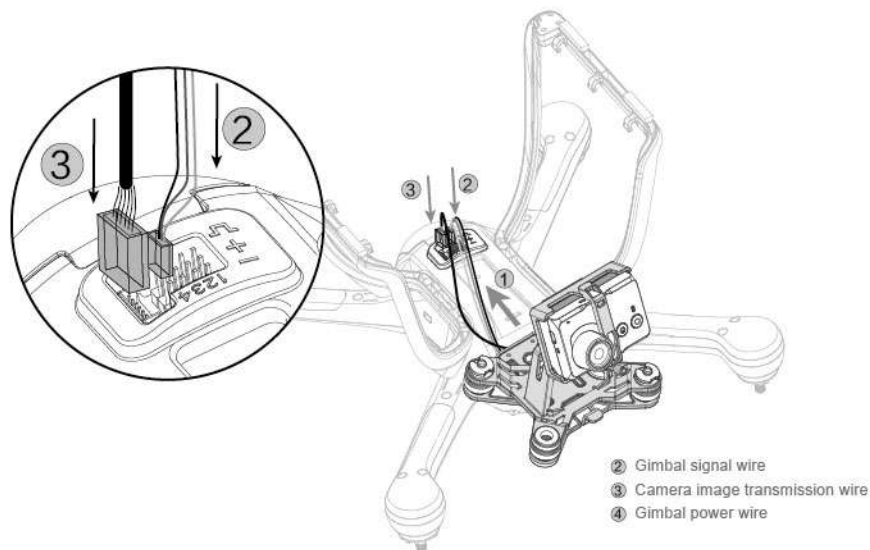
Step 1: Take out the 1 axis gimbal from the box, aim at the bottom slot with Shock Resistance Equipment slot, levelly slip into the bottom;

Step 2: Connect the gimbal signal plug with one of the external interface;

Step 3: Insert the image transmission plug into the left slot;

Step 4: Connect the power plug.

After the installation, power on the X4 Pro, the 1 axis gimbal will power on and adjust automatically. Slip the T2 rotary switch can easily control the gimbal rotation.



3.3.2 GIMBAL INSPECTION AND EXCEPTION HANDLING

- ⚠ • Gimbal engine abnormal, due to the unlevel surface had contact the gimbal, or the gimbal crashed or hit. Put the X4 Pro on a level and open surface before flight, do not collide the gimbal after it power on
- Flying in fog or cloud will cause Dew Formation and lead to faulty gimbal. The gimbal will be normal after the it is dry.

3.4 PREPARE THE PARACHUTE

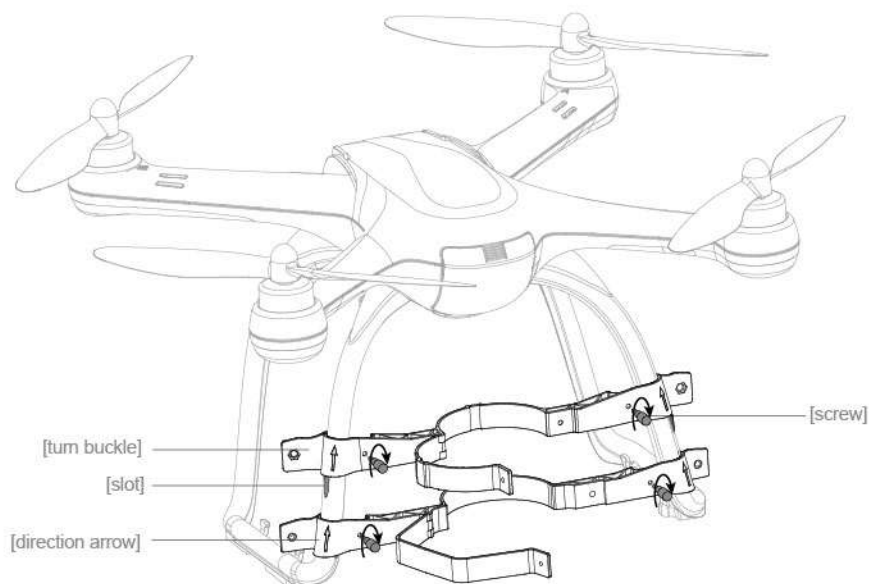
Refer to THE *PARACHUTE INSTRUCTION MANUAL*

Hubsan X4 Pro includes parachute set. The power of the parachute is standalone, which means even when the X4 Pro Li-Po battery power running out, the parachute can still work. There is an inner sensor inside the parachute, when the X4 Pro goes abnormal the sensor will detect it and work immediately: commanding the parachute to open automatically, so that the X4 Pro can land safely to avoid causing damages.

3.4.1 INSTALL THE PARACHUTE (EXCLUDED, NEED BUY FROM HUBSAN)

Step 1: Install the fix set

Take out the parachute set from the box, remove the screw from the fix set, open the turn buckle; Make sure the direction of the fix set is up straight as the arrows show. Put the fix set onto the undercarriage until it reach the slot position; Fix the screw to the fix set as the picture shows;

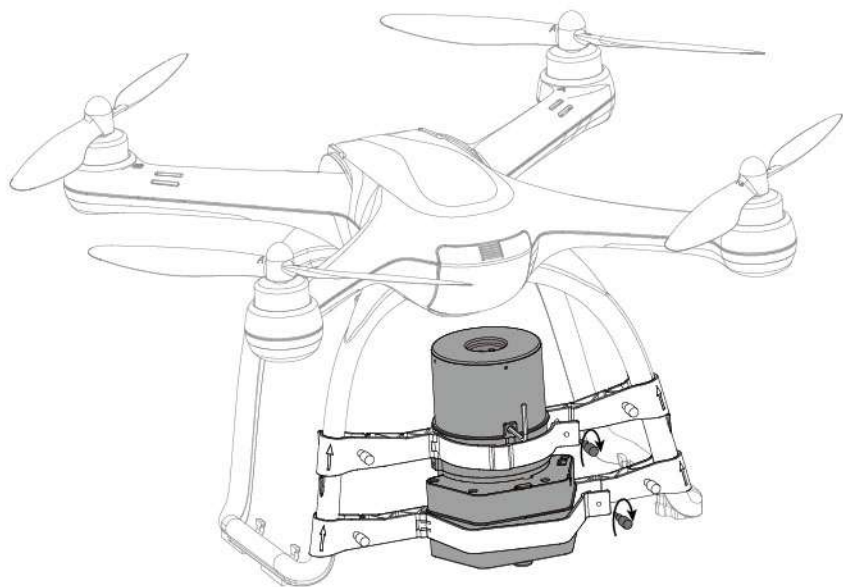


- ⚠ • Pay attention to the direction of fix set, do not install wrongly(the arrow on the fix set should be direct up straight)
- Make sure the fix set reach the slot position before fix the screw, or it will cause unstable and the X4 Pro will shake during flying.

Step 2: Install the parachute main set

Fix the triggering state parachute set onto the fix set, tight the screw.



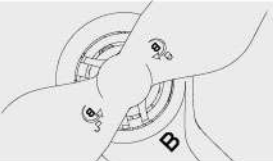



After the parachute set triggered, open the middle screws to re-install the parachute cloth. (Refer to the Parachute Instruction Manual for more information)



3.5 PREPARE THE PROPELLER SET

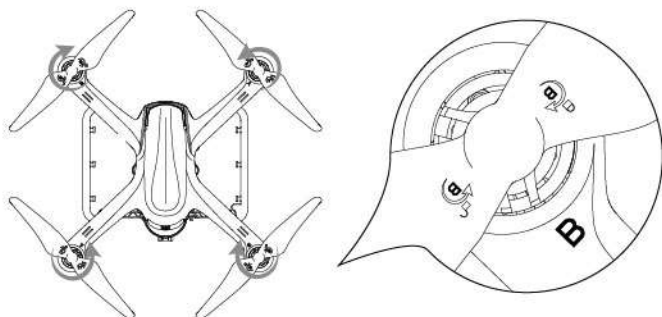
Hubsan X4 Pro equipped with 9 inch propellers—black and grey colors. The propellers are easily damaged, please purchase spare propellers from Hubsan.

3.5.1 INTRODUCTION

	propeller A	propeller B
Diagram		
Installation Position		
Symbol explanation	 LOCK: In this direction, tighten the propeller onto the motor shaft  UNLOCK: In this direction, remove the propeller from the motor shaft	

3.5.2 METHOD

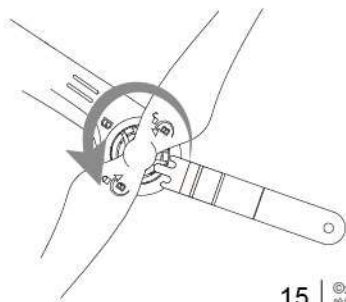
Take out the 4pcs propellers, install them tightly onto the accordance motor shafts.



- ⚠ • The propellers are designed to automatically tighten up, do not screw it too tight. Do not use screw glue.
- Make sure the black and grey propellers installed correctly, it cannot fly if the propellers installed wrongly.
- Wear gloves when install the propellers to avoid scratches as the propellers are thin and sharp.

3.5.3 REMOVE PROPELLER

Hold the motor with the Propeller removal wrench, rotate the propellers in unlock direction to remove the propeller.

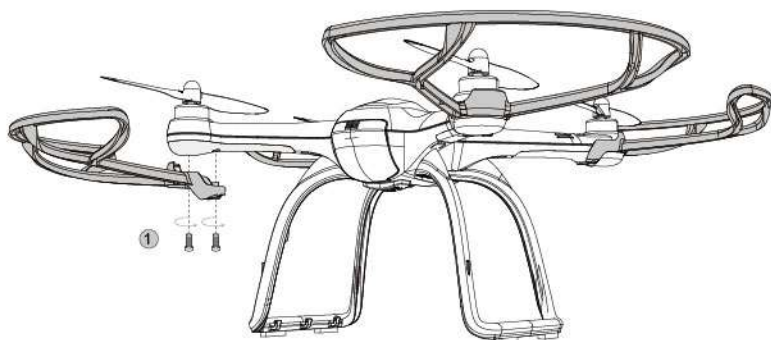


- ⚠ Check if the propellers installed correctly before every flight.
- Check if the propellers are in good condition, need to exchange if propellers broken or aging.
- Do not touch or near the speedy propellers or motors to avoid scratches or injuries.
- Always use Hubsan propellers to ensure best flight experience.

3.5.4 PREPARE THE PROPELLER GUARD

As for beginners, we recommend that users use the Hubsan X4 Propeller Guard to enhance the safety of flying. The Propeller Guard is optional.

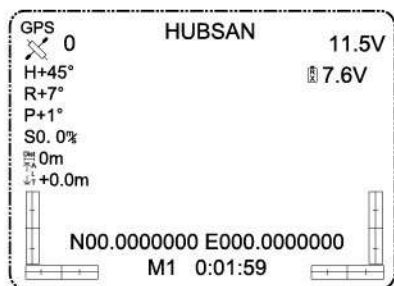
Method: Fasten the screw to install the propeller guard as the below picture shows.



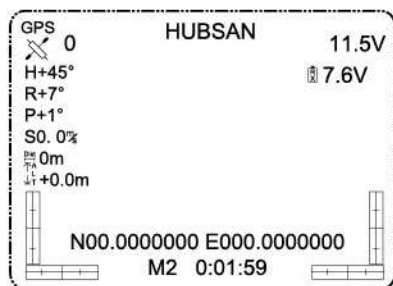
4 PREPARE THE 2.4GHZ & 5.8GHZ TRANSMITTER

4.1 INTRODUCTION AND FUNCTIONS

4.1.1 MAIN MENU

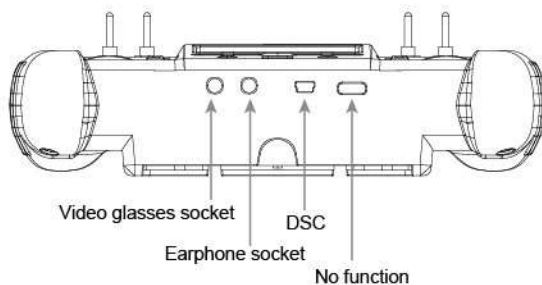
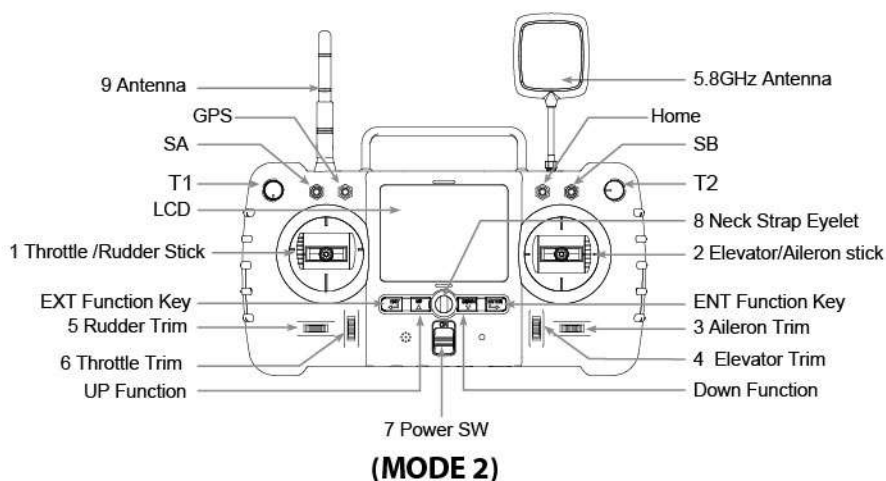
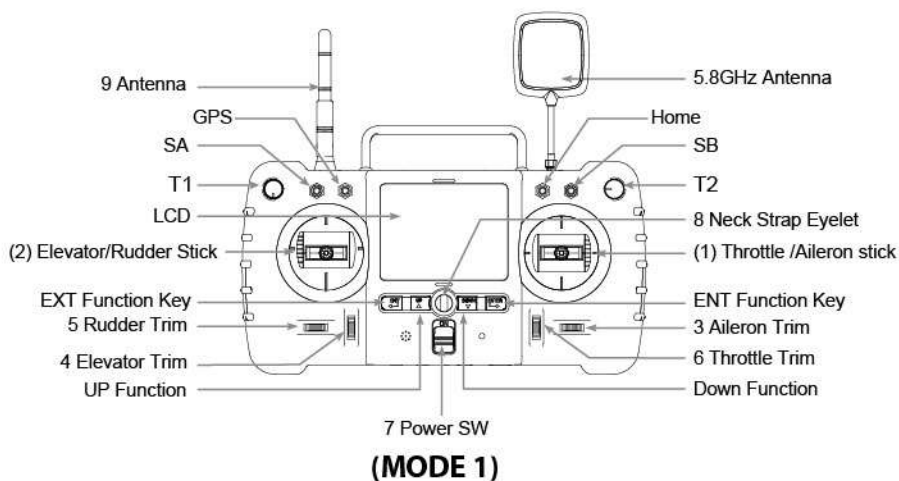


MODE 1



MODE 2

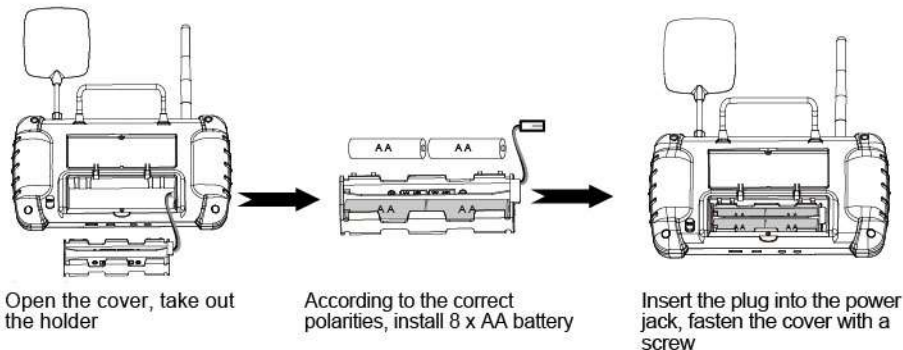
4.1.2 TRANSMITTER



4.2 INPUT KEY FUNCTION

S/N	IDENTIFICATION	FUNCTION
1	Throttle/Rudder Stick	Forward and backward movement of the stick will make the X4 Pro increase or decrease speed respectively. Left and right movement of the stick makes the X4 Pro yaw left/right respectively.
2	Elevator/Aileron Stick	Forward and backward movement of the stick makes the X4 Pro nose point up/down respectively. Left and right movement of the stick makes the X4 Pro roll left/right to initiate a turn.
(1)	Throttle /Aileron stick	Forward and backward movement of the stick will make the X4 Pro increase or decrease speed respectively. Left and right movement of the stick makes the X4 Pro roll left/right to initiate a turn.
(2)	Elevator/Rudder Stick	Forward and backward movement of the stick makes the X4 Pro nose point up/down respectively. Left and right movement of the stick makes the X4 Pro yaw left/right respectively.
3	Aileron Trim	Aileron trim adjusts left and right roll.
4	Elevator Trim	Elevator trim adjusts up and down movement.
5	Rudder Trim	Rudder trim adjusts left and right yaw.
6	Throttle Trim	Throttle trim adjusts speed of motor.
7	Power SW	Pushing the switch up powers on the transmitter, pulling it down switches it off.
8	Neck Strap Eyelet	For the attachment of a neck strap which eases the tension of your hands from holding the transmitter.
9	Antenna	Transmits the 2.4Ghz wireless signal.
10	T1/SB	No function for now.
11	SA	Push: Headless Function Pull down: Normal Function
12	GPS	Push: Altitude mode and Position Mode Pull down: Exit the Altitude Mode and Position Mode
13	Home	Push: Enter the RTH function. Pull down: Exit the RTH function.
14	DSC (Optional)	Connects to the data cable of computer simulator.

4.3 BATTERY MOUNTING



- Do not mix old and new batteries
- Do not mix different types of batteries
- Do not charge non-rechargeable battery.

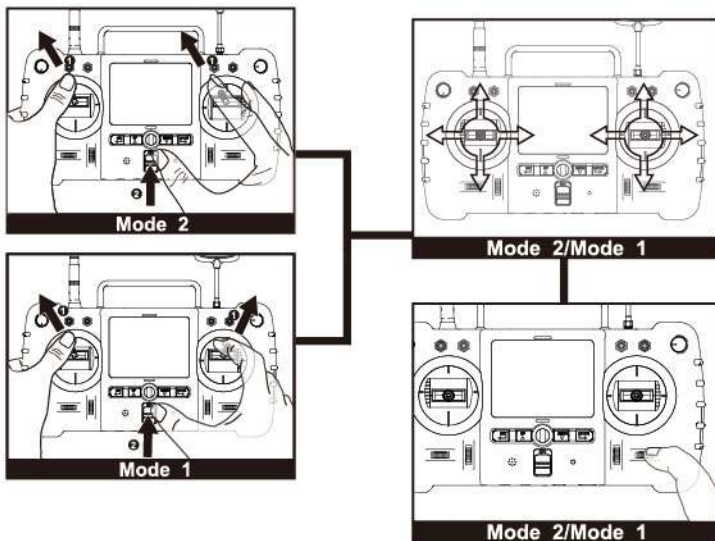
4.4 TRANSMITTER STICK CALIBRATION

MODE 1 transmitter

Push the left joystick to the top on the left, and the right joystick to the top on the right, keep them in this position and then turn on the transmitter, the LCD screen will show "CALIBRATE STICK". Move the joysticks in a circling motion about 3 times, and then release the joystick and press any trim to save and exist.

MODE 2 transmitter

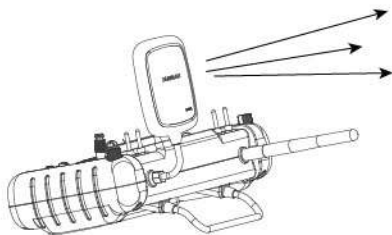
Push the two joysticks to the top on the left and keep them in this position, and then turn on the transmitter, the LCD screen will show "CALIBRATE STICK", move the joysticks in a circling motion about 3 times, and then release the joystick and press any trim to save and exist.



4.5 ANTENNA SIGNAL INSTRUCTION

The live video distance is around 1000 meters. In order to gain the furthest communication distance, make sure the transmitter's antenna pointed vertically and no obstacles between it and the X4 Pro when in flight.

Keep the antenna vertical and let the signal surface(the logo side) towards the X4 Pro video signal antenna.

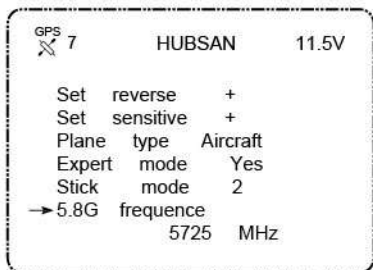
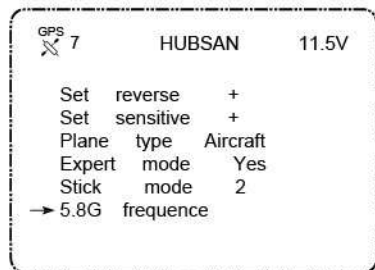


Bend the transmitter antenna vertically, and keep the signal surface towards the X4 Pro video signal antenna; Ensure there is no obstacles between the two, or the X4 Pro will lose control.

4.6 FREQUENCY SELECTABLE 5.8GHZ

The transmitter will automatically find the best frequency to ensure the quality live video transmission. in case there is any interference in your location, you can change the setting from the range 5725MHz~5865MHz to get longer range and better video transmission.

Hold down the ENTER key for 1 second to enter setting status, move the arrow to 5.8G FREQUENCY with up/down key, press the ENTER key again and select the frequency you need with up/down key, hold down the EXIT key for 2 seconds to confirm and exit.



START TO FLY

When the installation is finished, please do some practices and training (For example: use some imitator to do some fly training or ask some professional guidance.) Please choose the suitable place to play the X4 Pro.

THE FLIGHT ENVIRONMENT FOR X4 PRO

- (1) Fly the X4 Pro in an open place. The GPS signal may become weaker and the position holding and RTH function may lapse when the X4 Pro fly around trees and buildings.
- (2) Do not play the X4 Pro in the bad weather. Such as, strong wind, heavy snow, rainy day and foggy day.
- (3) When play the X4 Pro, please keep away from the barrier, people, high-line cable, trees and so on.
- (4) Do not play the X4 Pro in places such as station and launch tower, to avoid interaction.
- (5) Can not play in the south and north pole.
- (6) Do not place the X4 Pro in the forbidden place.

CHECK BEFORE FLYING

- (1) Make sure the power is full of the Transmitter, X4 Pro, parachute, and camera.
- (2) Make sure the propellers install correctly.
- (3) Make sure the gimbal vibration setting is completely and the installation is correctly.
- (4) Make sure whether the plug of the parachute is in or out, and make sure the power of the parachute is full.
- (5) Make sure insert the Micro-SD card when do shooting and recording.
- (6) Make sure when the power on, the camera and gimbal can work normally.
- (7) Make sure whether the motor can work normally or not.

5.BIND THE TRANSMITTER AND THE X4 PRO

Power on the transmitter, then the X4 Pro; the transmitter will show the lipo battery voltage and other values as below shows. If no value shows, need to bind the transmitter to the X4 Pro. Power on the transmitter, then press the ENTER button until the LCD displays "System initialize", power on the X4 Pro when the LCD screen displays "Bind to aircraft", the binding will be finished in 3 seconds.



6.COMPASS CALIBRATION

After the X4 Pro power on, the blue LED of the X4 Pro will blink circularly, put the X4 Pro on a level surface, do not move it. Then the LCD screen will show "Check Compass", indicating the X4 Pro is checking the compass. Keep the X4 Pro in a level surface, slowly rotate it until the "Check Compass" disappear.

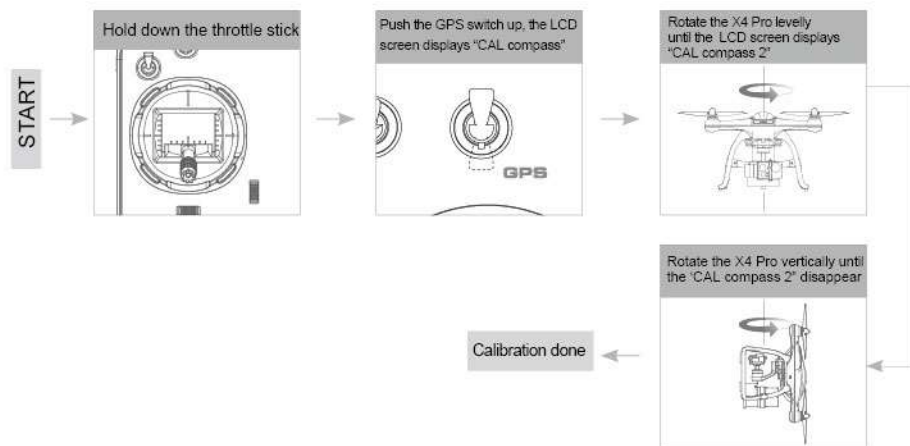
If the X4 Pro sense abnormal of the compass sensor, it will enter into the state of compass calibration, the transmitter LCD screen will show " CAL compass 1", levelly spin the X4 Pro until the LCD screen shows " CAL compass 2", then vertically spin the X4 Pro until the " CAL compass 2" disappear, indicating successful calibration.

If the compass data is wrong, you can also pull the Switch GPS to calibrate the compass. Below is the method:

- ⊗ Do not do the calibration in the magnetic field, such as in parking lot, magnetite, places with underground reinforced and so on.
- Do not bring the keys, magnetic thing, and mobile phone when you do calibration.
- Do not do the calibration nearby the metal area.

6.1 CALIBRATION

Method of calibration: Hold the Throttle Stick in the bottom down, quickly move the Toggle Switch until the LCD screen shows " CAL compass 1", levelly spin the X4 Pro until the LCD screen shows " CAL compass 2", then vertically spin the X4 Pro until the " CAL compass 2" disappear, indicating successful calibration.



6.2 CHECK GPS CONDITION

Fly the X4 Pro after the GPS value changed into 5 or above 5, then the position hold function will be work and the X4 Pro can record the take off position, so the RTH function will be activated.

7. START/ STOP THE MOTORS

Start the motors

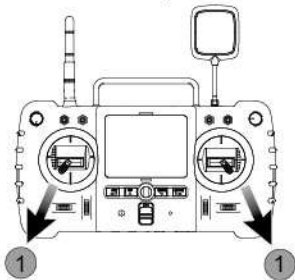
Method 1: Pull the two sticks as the picture shows, release it after the motor start;

Method 2: Press the ENTER button for one second, the LCD will indicate the status of the X4 Pro.

Stop the motors

Method 1: Pull the two sticks again as the picture, release it after the motor stop;

Method 2: Press the ENTER button for one second, the motor will stop.





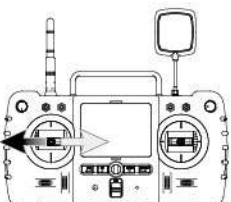
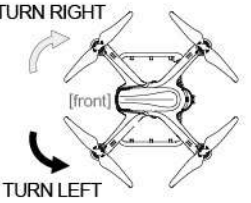
⊘ Do not stop during the flight, or it will lead to falling danger.

- 💡 • Move the stick as brisk and rapid as you can, release the stick after the motor starting or stop
- Turn the throttle to the lowest position gently, the throttle stick will be locked, then the X4 Pro will descend slowly, move the throttle stick upward to unlock the throttle.

8 BASIC FLIGHT


The operation mode for the transmitter is Model 2, the manual will take the Model 2 as example to illustrate the transmitter's operation.

- 📖 • The stick return to the center: The transmitter's stick is in the center.
- Stick's rudder offset: The offset of the transmitter sticks from the center.

Transmitter (Model 2)	X4 Pro	Control Ways
		<p>The throttle stick is for controlling the X4 Pro ascend or descend,</p> <p>The X4 Pro will ascend when move the stick to upward, and the X4 Pro will descend when move the stick to the downward, and it will remain unchanged when the stick on the center (fixed-height automatically)</p> <p>Move the throttle stick upward over the center, the X4 Pro can take off. (Pls move the stick gently, to prevent the X4 Pro from ascending hastily)</p>
		<p>Rudder stick is for controlling the direction of the X4 Pro</p> <p>The X4 Pro will rotate anticlockwise when you move the stick to the left. The X4 Pro will rotate clockwise when you move the stick to the right. The rotation angle is zero and the X4 Pro doesn't rotate when the stick is on the center.</p> <p>The strength for moving the stick is correspond to the angular velocity of rotating, the angular velocity of rotating will be greater if the strength for moving the stick is larger.</p>

9 LOSE CONTROL PROTECTION FUNCTION

When the X4 Pro lose the signal of the transmitter (lose control), the flight control system will control the X4 Pro to land or return to the departure position and land automatically, it can prevent the X4 Pro from losing or crashing.

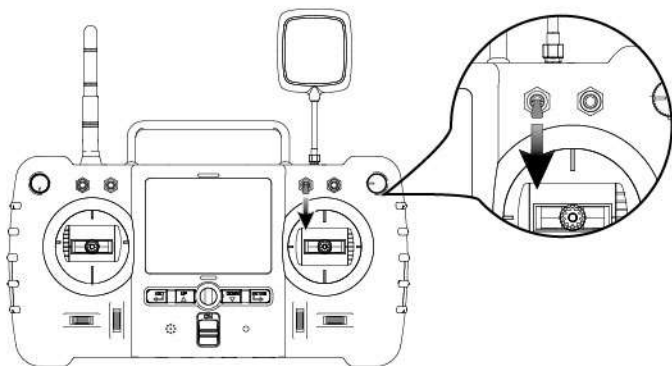
-  **DEPARTURE POINT:** When the X4 Pro enter into safe flight state (no GPS) from semi-safe flight states, the X4 Pro will record the position as departure point.

9.1 THE CONDITION WHICH CAN ENTER INTO THE LOSE CONTROL PROTECTION MODE

- (1) The transmitter is power off.
- (2) The flight distance is beyond the effective distance of the transmitter's signal's transmission.
- (3) There are obstacles between the X4 Pro and the transmitter.
- (4) The transmitter's signal was disturbed.

9.2 EXIT THE RTH MODE

Pull down the RTH function switch, the X4 Pro will exit the RTH Mode.



- ⊗ • To ensure the X4 Pro can return to the departure point successfully after it lost control, fly after the X4 Pro enter into the safe flight states.
- During the process of losing control & returning, if the quantity of GPS star less than 6, and lasting for 20 seconds, the X4 Pro will descend automatically.
- The X4 Pro can't avoid obstacles when it is in RTH mode, you can set the height value to avoid the obstacles.

10 INTELLIGENT BATTERY ALARM FUNCTION

When the voltage of the X4 Pro' battery is lower than 10.8V, the X4 Pro will descend slowly, although the X4 Pro will ascend when increasing the throttle , you should get the X4 Pro back and land as soon as possible.

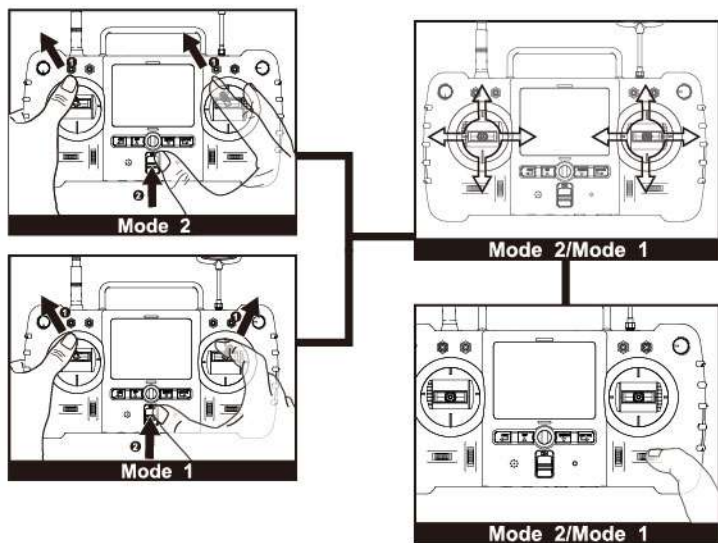
X4 Pro Battery	BAT	65%	TIME	00:19
	TX	35%	DIST	0m
	RF	88%	ALT	+ 3m
	GPS	0	DIR	NE
	ALT	Hold	Headless	
	Low Battery TX			
	Transmitter Low battery Alarm			

1.The motor doesn't work.

Recalibrate the transmitter.

Mode 2: Put the two sticks to the upper left position and hold, then power on the transmitter. Then rotate Both sticks a couple of times in full circles. Then hold down any trim until the LED on the TX blinks red, signaling a successful calibration. (See the picture below.)

Mode 1: Put the left stick to the upper left position and the right stick to the upper right position and hold, then power on the transmitter. Rotate both sticks a couple of times in full circles. Then hold down any trim until the LED on the TX blinks red, signaling a successful calibration. (See below.)



2.X4 Pro shift to other side during flying.

When power on, please keep the X4 Pro steadily for 10 seconds, the purpose of this is to initialize the sensor.

3.GPS position system is not good.

Please check the surrounding carefully, see whether there is other things interfere the GPS signal or not, then calibrate the compass sensor again.

4.The Transmitter sounds “Beep, Beep”

Please check the power of the battery carefully, stop flying and charge the battery.

5.The X4 Pro will sound “Beep, Beep” when power on.

Update the flight control program again.

Electrical and electronic equipment that are supplied with batteries (including internal batteries)

WEEE Directive & Product Disposal

At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

Internal / Supplied Batteries.

This symbol on the battery indicates that the battery is to be collected separately.

This battery is designed for separate collection at an appropriate collection point.



FCC INFORMATION

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 local dealer or an experienced radio/TV technician for help.

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

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.