6.1 THE FLIGHT ENVIRONMENT

(1) The flying area should be open and without tall buildings or other obstacles; the steel structure within building would interfere with the compass.

(2) DO NOT fly in bad weather such as strong wind, heavy snow, rain or foggy day.

(3) Keep away from barriers, people, power cables, trees, and other obstructions.

(4) Do not fly near radio towers or airports.

(5) The X4 control system wil not work properly at the South or North Pole

(6) DO NOT fly in restricted areas and please follow your country's laws and regulations.

6.2 CHECK BEFORE FLYING

(1) Make sure the batteries of the transmitter and the X4 are fully charged.

(2) Make sure the propellers are installed correctly and tightly.

(3) Make sure the memory card is installed and has sufficient room remaining for recording.

(4) Make sure all motors work properly.

6.3 THE LINK OF THE TRANSMITTER AND THE QUAD COPTER

The transmitter and the quad copter are linked before delivery. Should you change the transmitter or the quad copter, re-linkage is required.

Procedures:

1.Press the photo function button and turn on the transmitter simultaneously, waiting for the initialization. " System initialize" letters display on the LCD

2.Release the photo function button. "Bind to Plane" letters display on the LCD.

3.Power on the quad copter, place it close to the transmitter, the linkage matched indicating by a " beep" sound

4.Should the linkage not match, please repeat the above steps.

6.3 COMPASS CALIBRATION

Compass calibration is required before the first time flight otherwise the system may not work properly. The compass is very sensitive to electromagnetic interference which can cause abnormal compass data and lead to poor flight performance or even flight failure. Regular calibration enables the compass in optimum performance

⊘ • Do not calibrate the compass in a strong magnetic field

• Do not carry ferromagnetic materials with you while calibrating the compass, such as keys, cell phones.

6.4 CALIBRATION PROCEDURES

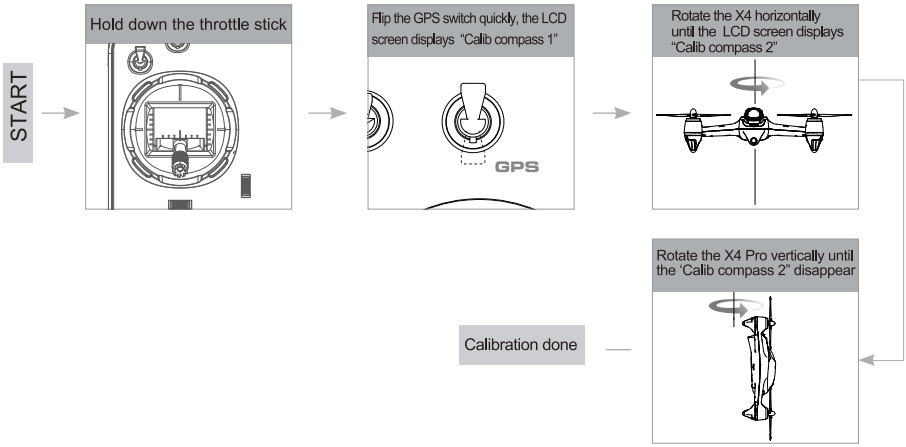
Please carry out the calibrating procedures before the first flight.

1.)Hold the Throttle Stick fully down, flip the GPS switch quickly until the transmitter displays " Calib compass 1"

2.) Rotate the X4 horizontally until the LCD screen displays " Calib compass 2"

3.) Rotate the X4 vertically until the " Calib compass 2" disappears

4.) Calibration done.



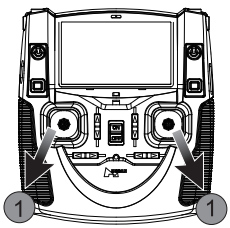
7. START/ STOP THE MOTORS

Start the motors

Method : Pull the two sticks as the picture shows. Release them after the motors start.

Stop the motors

Method : Pull the sticks again, as seen in the picture, and release them after the motors stop.



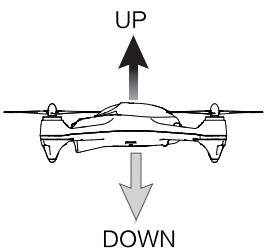
⊘ Do not stop the motors during the flight to avoid any crash.

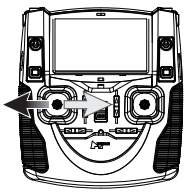
Push the sticks as slightly as you can. Release the sticks after the motors start or stop.

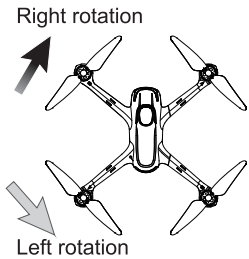
8. BASIC FLIGHT

The operation mode for the transmitter is Mode 1 or Mode 2. The manual will use Mode 2 as an 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	Control Ways
		The throttle stick controls the ascent and descent . Push up the stick and the X4 will ascend. Pull down the stick and the X4 will descend. When the stick in center, the X4 will hover and hold its alititude automatically .





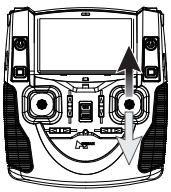
The Rudder stick controls the facing direction

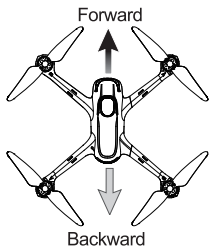
Push the stick left and the X4 will rotate counter-clockwise

Push the stick right and the X4 will rotate clockwise

When the stick is in center,the X4 rotation angle is zero and doesn't rotate

A harder push in either direction will cause the X4 to rotate faster in the corresponding direction.





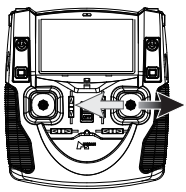
The Elevator stick moves the X4 forward and backward.

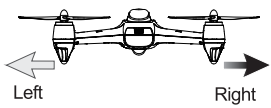
Push the stick up the and the X4 will fly forward ;

Pull the stick down and the X4 and backward.

When the stick is in center, the aircraft will hold its position.

The degree of stick movement corresponds to the degree of tilt and flying speed.





The Aileron stick controls left and right flight.

Push the stick left and the X4 will fly left

Push the stick right and the X4 will fly right

The X4 should be horizontal and unmoving at center stick.

The flight speed and tilt angle are linked to the distance pressed on the sticks.

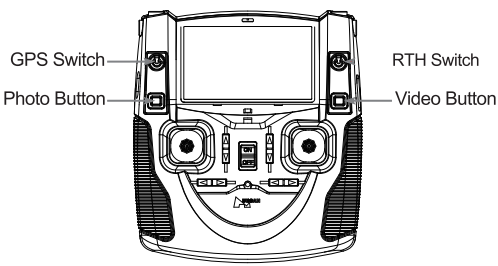
position 1 (upward)

position 2 (downward)

The GPS Switch is position-hold function switch.

In position 1 (up), the GPS functions are active.

In position 2 (down), the GPS functions are deactivated.



The RTH Switch is the RTH function switch.

Up (Position 1) activates the RTH function.

Down (Position 2) deactivates the RTH function.

Important Note: The GPS and Home functions are only for out door.

Please make sure the two switch keep downward when in door.

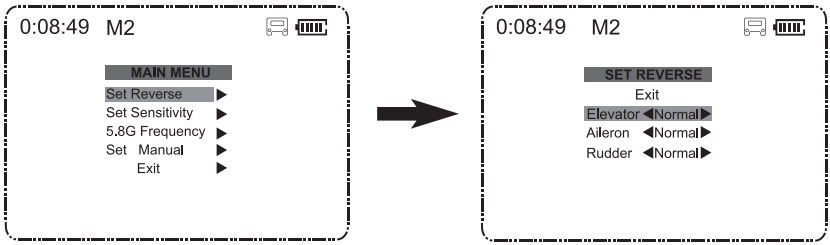
For the photo and the video functions, please always power off the quadcopter and the transmitter when inserting or removing the TF card

9 ADVANCED PERFORMANCE SETUP

9.1 REVERSING CHANNEL SETUP

If you would like to reverse any of the stick functions due to personal preference then follow the instructions below. Be aware that it will change the controls back to front.

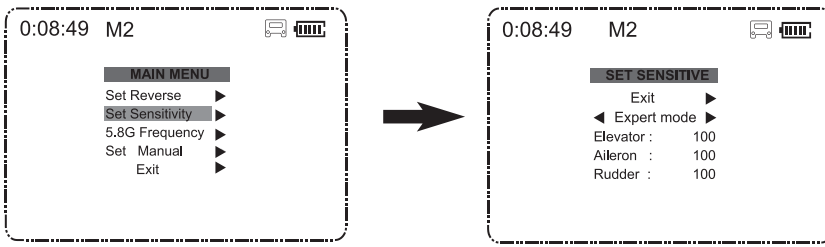
Pull the throttle stick to the lowest position and long press the Pitch stick simulatenously to enter into MAIN MENU interface. Push the Elevator stick up/down to select “Set Reverse”. Select the “Exit” to exit.



9.2 SENSITIVITY SET UP

If you would like to change the sensitivity of any of the stick functions then follow the instructions below.

Pull the throttle stick to the lowest position and long press the Elevator stick to enter into the MAIN MENU interface. Push the Elevator stick up/down to select “Set Sensitive”, push the stick right to enter into the “ set sensitive” interface, select “Expert mode” or “ Normal mode”. Select” Exit” to exit.

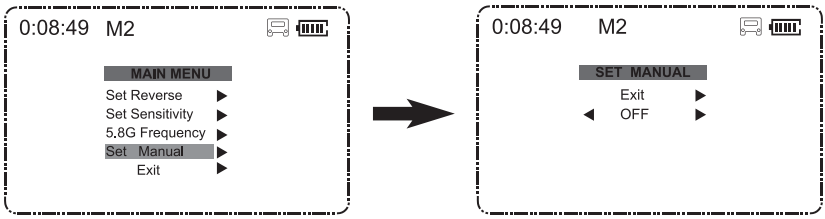


⚠ Sensitivity default setting is Expert Mode.

9.3 SET MANUAL SETUP

If you would like to make acrobatic flights, such as throwing, please switch off the GPS function and follow the instruction below to enter into the Manual mode

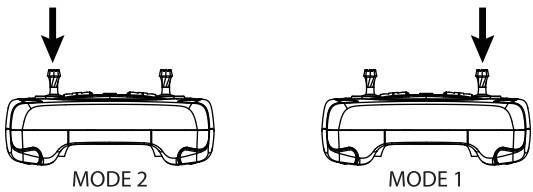
Pull the throttle stick to the lowest position and long press the Elevator stick to enter into the MAIN MENU interface. Push the Elevator stick up/down to select “Set Manual”, push the stick right to enter into the “ SET MANUAL” interface, select “ON” (without altitude function) or “OFF” (with altitude function).Select” Exit” to exit.



⚠ Manual Mode default setting is OFF.

9.4 HEADLESS MODE

Headless mode means the X4 will default any direction as its head in front of the transmitter.



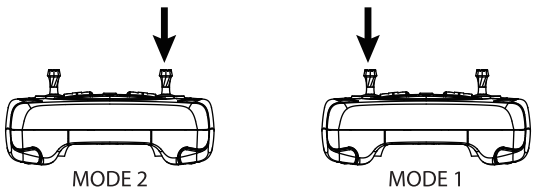
Press the Throttle stick 0.5 second to switch on/ off headless mode.

Press the stick to enter into the headless Mode, indicated by two "beeps" sounds and the “HEADLESS ON” displays on the LCD in a red flash.

Press the stick again to exit headless Mode, indicated by one "beep" sound and the ”HEADLESS OFF” display on the LCD in a green flash.

9.5 FOLLOW ME MODE

Follow me mode means the quad copter follows the transmitter automatically due to the built-in GPS system.



Press the Elevator stick for 0.5 second to switch on/ off follow me mode.

Press the stick to enter into the follow me Mode, indicated by two "beeps" sounds and the “ FOLLOW ON” displays on the LCD in a red flash.

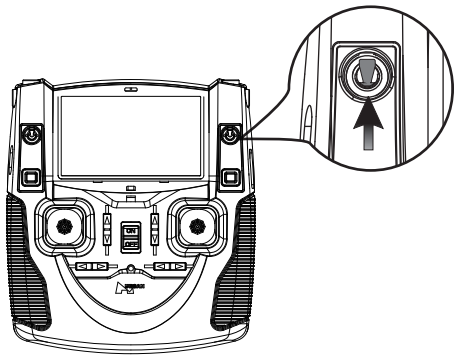
Press the stick again to exit follow me Mode, indicated by one "beep" sound and the “ FOLLOW OFF” displays on the LCD in a green flash.

⚠ The follow me mode only work when the GPS with 6 satellites at least.

9.6 RTH MODE

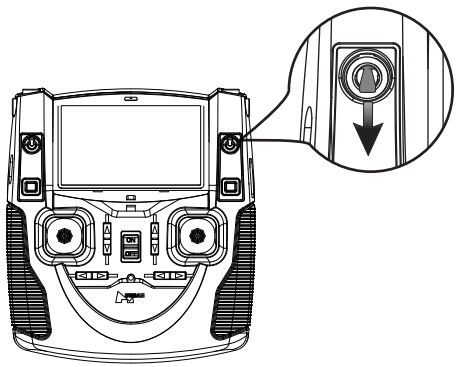
ENTER INTO RTH MODE

Push the GPS Switch and the RTH Switch up, and the quad copter will enters into RTH Home. The flight control system will control the quad copter fly back to the takeoff point automatically.



EXITING RTH MODE

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



⚠ The RTH MODE only work when the GPS with 6 satellites at least.

9.7 FAILSAFE MODE

If the X4 loses transmitter signal, the flight control system will take control of the model and either land it or return it to the 'home' position and land automatically. This helps prevent operators from losing or crashing their X4.

DEPARTURE POINT: When the X4 enters the failsafe mode (no GPS) from semi-safe flight states, the X4 will record that position as the 'home' point.

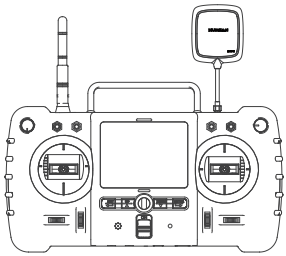
CONDITIONS WHICH ACTIVATE THE FAILSAFE MODE

(1) Transmitter is power off.
(2) The flight distance is beyond the effective distance of the transmitter's signal transmission.
(3) There are obstacles between the X4 and the transmitter.
(4) The transmitter's signal was interrupted by some other strong electronic interference.

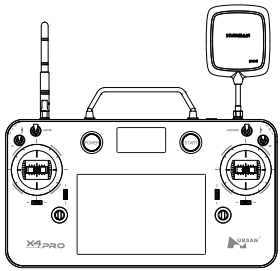
- To ensure that the X4 can return safely to its home point when signal is lost, fly the X4 in the safe flight state.
- If the quantity of GPS satellites drops below six for more than 20 seconds while the X4 is returning to home, the X4 will descend automatically.
- The X4 will not avoid obstacles automatically while in failsafe mode. You must set the height value to avoid obstacles in the X4's path.

10. OPTIONAL TRANSMITTRE

Option 1. Multi-function FPV TX FPV1
5.8G real-time video transmission with 3.7 inches LCD



Option 2. Android System Transmitter H7000
1280*720P IPS LCD and dual-core 1GHz Processor



H501S TROUBLESHOOTING

1.Transmitter and X4 do not pair.

Throttle stick needs to be in the full down position. Make sure you do not move the transmitter sticks or trim during initial power-on.

2. Transmitter LED suddenly goes out.

Replace the AA batteries in the transmitter.

3. Trasmitter display is not showing the setting interface after holding down the ENT button for 2 seconds.

The throttle stick needs to be in the full down position.

4. Propellers are not working well.

(1) Battery voltage is too low.

(2) Pair the X4 with the transmitter again.

(3) Land the X4 with the throttle stick in the full down position for 3 seconds and then take off again.

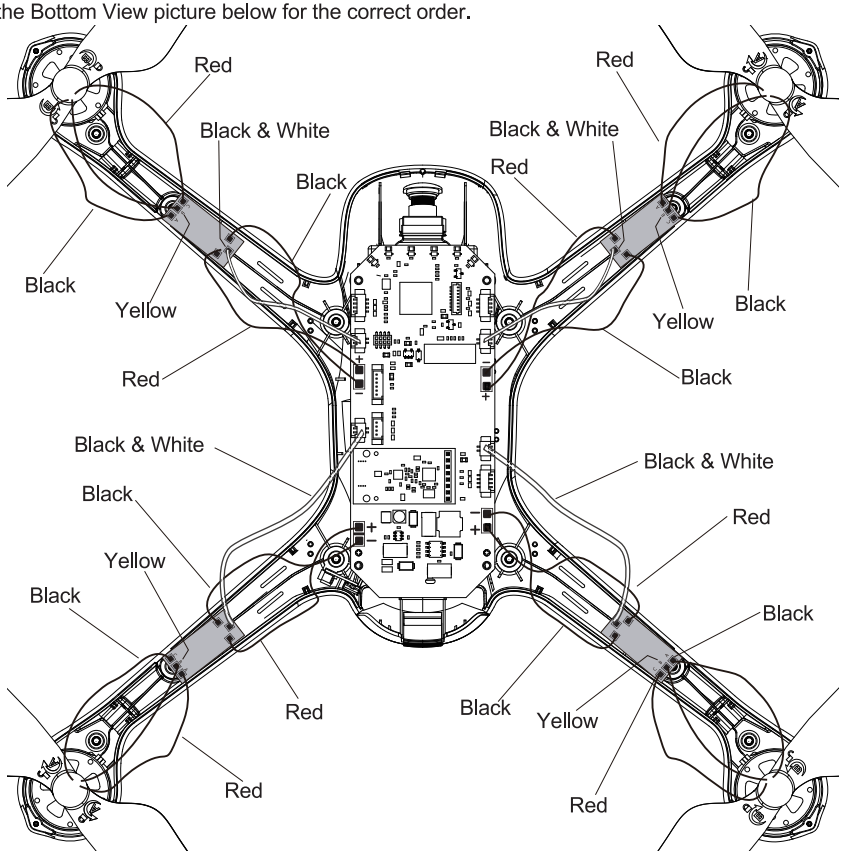
5. Quadcopter is shaking and making noise.

Check that the motors, canopy, body and propellers are all properly positioned.

6. Cannot take off.

(1) Make sure the propellers are installed correctly. The propellers are marked with "A" (clockwise) and "B" (counterclockwise). Refer to the Top View picture below for the correct orientation.

(2) Make sure that each motor is installed correctly. There are two different motors with different motor shaft: clockwise motor shaft has groove, while anti-clockwise motor shaft doesn't have. Refer to the Bottom View picture below for the correct order.



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.

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.

User manual is subject to change without prior notice due to unforseen product upgrades.

Download the latest user manual from

WWW.HUBSAN.COM

VERSION 1.0 EN

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.

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.