

# **H122D X4 RACING DRONE**

《H122D Quick Start Guide》

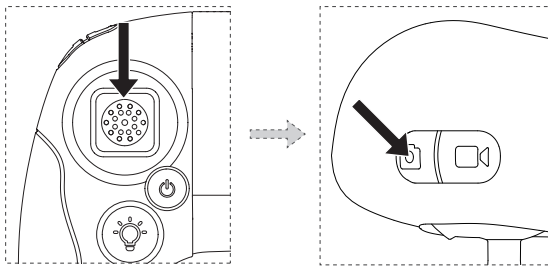
Version 1.1

# The first flight configuration: Aircraft + HT015 Transmitter

## Step 1

### Binding the aircraft and transmitter

1. Pull and hold the throttle to its lowest position.
2. Hold down the Photo key and power the transmitter on. The transmitter's status LED will flash red; please do not press or touch any other keys, buttons or sticks while this process is ongoing. Users may let go of the Photo key and throttle. Connect the aircraft to its battery and allow it to bind to the transmitter. The two must be very close to each other; when the bind is successful, the binding status LED will turn green.



All illustrations are shown in Mode 2 (American hand)

## Step 2

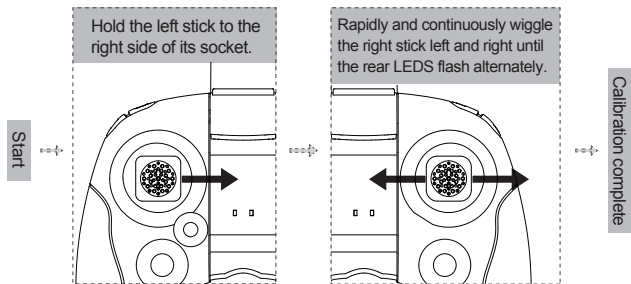
### Horizontal calibration (also known as Gyro calibration)

Horizontal calibration is required when the aircraft drifts on the horizontal

plane during flight. When this happens, land the aircraft and disarm its motors. Follow the below steps to do a horizontal/gyro calibration.

1) Place the aircraft on a completely flat surface and then follow the below calibration procedure. Hold the left stick to the right side of its socket. Rapidly and continuously wiggle the right stick left and right until the rear LEDS flash alternately.

2) Calibration is complete when the LED indicators stop flashing. It is recommended that users wait for 15-20 seconds after the calibration is completed before flying again.

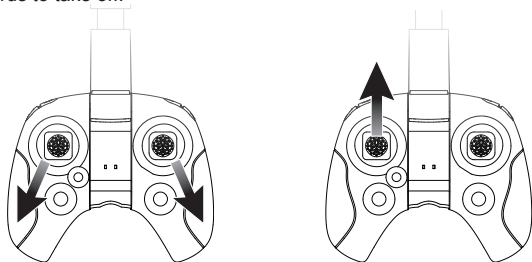


When using the horizontal calibration, please ensure that the aircraft is on a completely flat surface. Aircraft motors should be completely disarmed. Do not move the aircraft during calibration or calibrate on an uneven/tilted surface, or there will be errors.

## Step 3

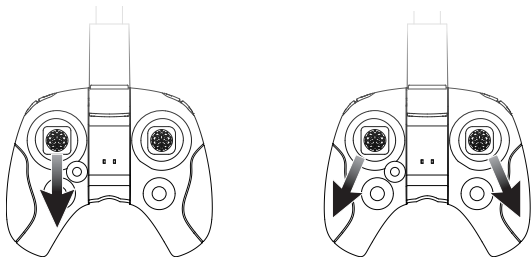
### Takeoff

Simultaneously pull the transmitter joysticks diagonally down-out to arm the motors (as shown in the below figure). Pull the left joystick (throttle) upwards to take off.



### Landing

Slowly and gently pull the throttle joystick down until the copter has completed its descent on the ground. Simultaneously pull the transmitter joysticks diagonally down-out to disarm the motors (as shown in the below figure).

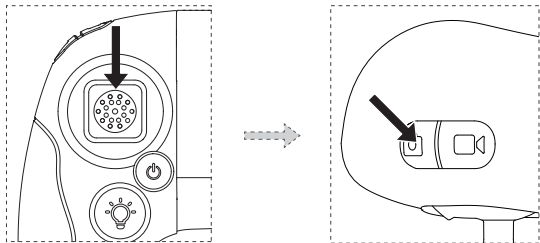


## The second flight configuration: Aircraft + HS001+ HT015 Transmitter+HV002 Video glasses

### Step 1

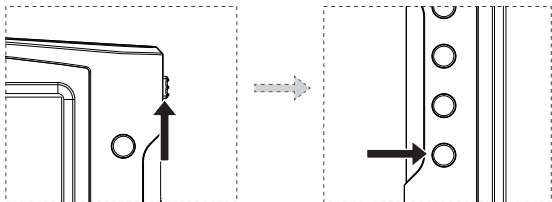
#### Binding the aircraft and transmitter

1. Pull and hold the throttle to its lowest position. Hold down the Photo key and power the transmitter on; allow the transmitter to enter binding mode.



All illustrations are shown in Mode 2 (American hand)

2. Power the HS001 on by pushing the power switch up. Long press the display's binding button (shown below) to allow the HS001 to enter binding mode. The display will beep three times.



3. Connect the drone to its battery. While all units are in either binding or pairing modes, please do not touch, press or move any of the transmitter joysticks, buttons or keys. Doing so will cause the aircraft to drift or perform unstably during flight. After binding is successful, the transmitter's binding status LED will be a solid blue.

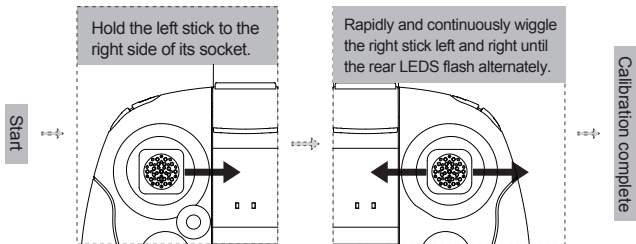
## Step 2

### Horizontal calibration (also known as Gyro calibration)

Horizontal calibration is required when the aircraft drifts on the horizontal plane during flight. When this happens, land the aircraft and disarm its motors. Follow the below steps to do a horizontal/gyro calibration.

1. Place the aircraft on a completely flat surface and then follow the below calibration procedure. Hold the left stick to the right side of its socket. Rapidly and continuously wiggle the right stick left and right until the rear red LEDs flash alternately.

2. Calibration is complete when the LED indicators stop flashing. It is recommended that users wait for 15-20 seconds after the calibration is completed before flying again.



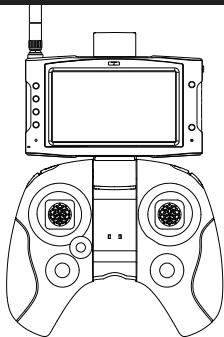


When using the horizontal calibration, please ensure that the aircraft is on a completely flat surface. Aircraft motors should be completely disarmed. Do not move the aircraft during calibration or calibrate on an uneven/tilted surface, or there will be errors.

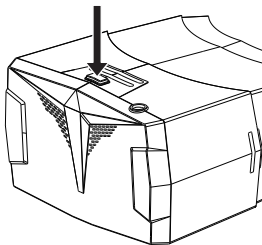
### Step 3

#### Installing the HS001 display

Option 1: Secure the HS001 display to the HT015's mobile device bracket.



Option 2 (with the HV002 video goggles): Press the release key on the HV002 goggles to release its face panel. Install the HS001 into the exposed compartment and shut the panel. After the installation, one may put the goggles on and adjust to fit with the adjustable head strap.

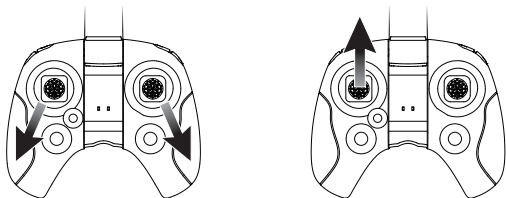


After installing the display, check if the face panel is loose. If yes, please readjust accordingly.

## Step 4

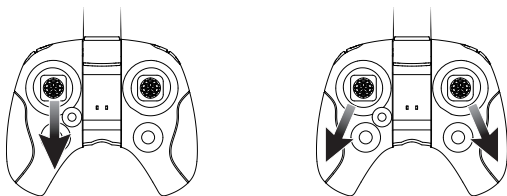
### Takeoff

Simultaneously pull the transmitter joysticks diagonally down-out to arm the motors (as shown in the below figure). Pull the left joystick (throttle) upwards to take off.



### Landing

Slowly and gently pull the throttle joystick down until the copter has completed its descent on the ground. Simultaneously pull the transmitter joysticks diagonally down-out to disarm the motors (as shown in the below figure).

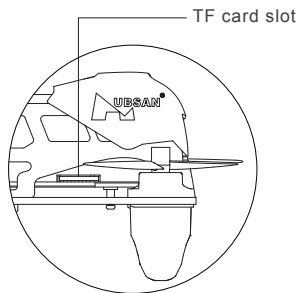
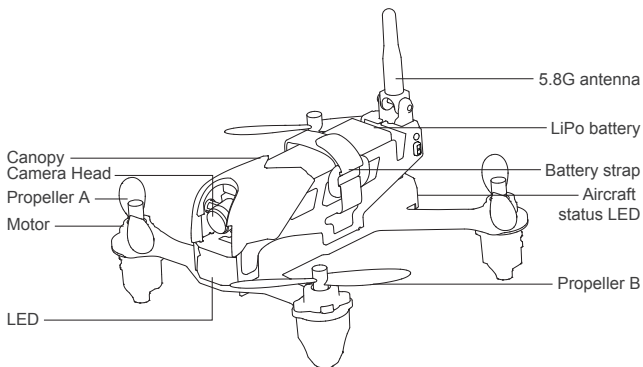


After flight, please completely shut off the aircraft, transmitter and external display.

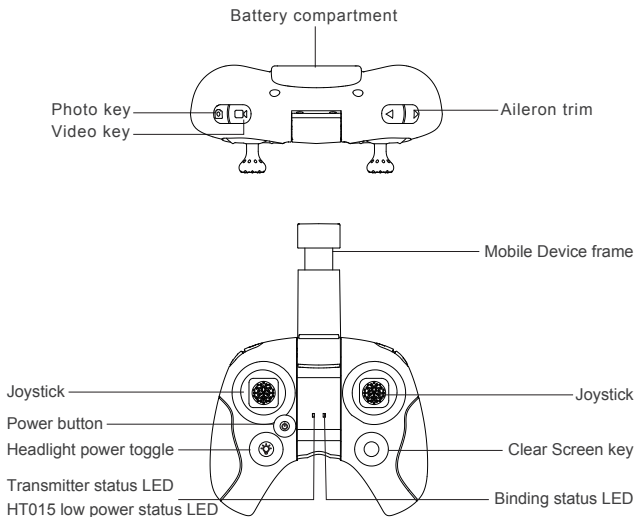


## Getting to know your H122D

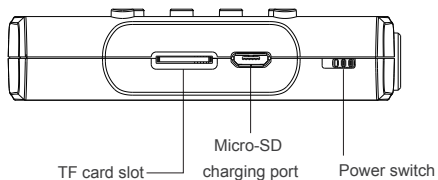
Thank you for purchasing a HUBSAN product. The H122D is an easy to fly racing aircraft, paired with a multifunctional remote control.

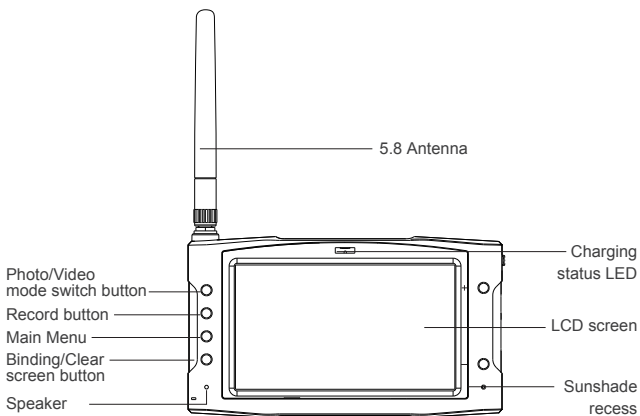


## Getting to know your HT015

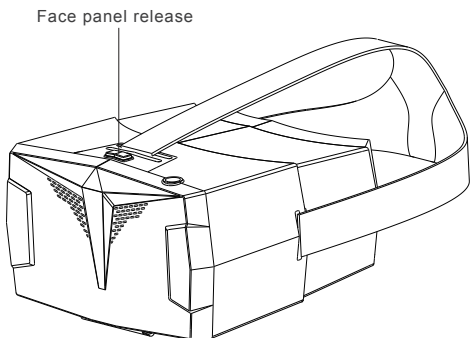


## Getting to know your HS001

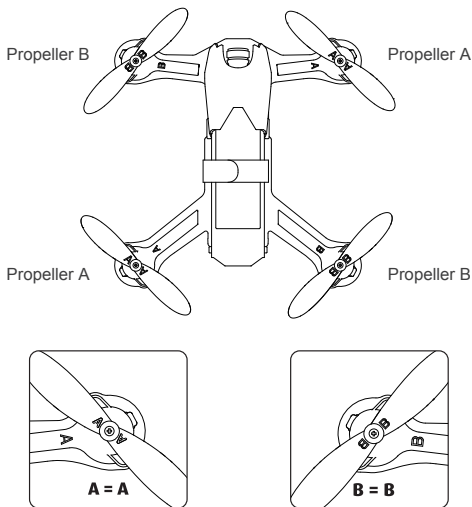




## Getting to know your HV002

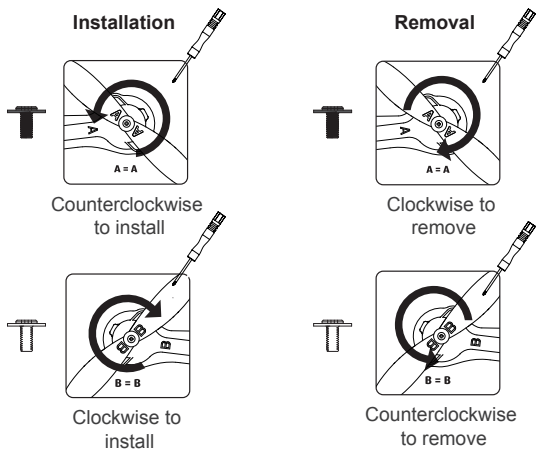
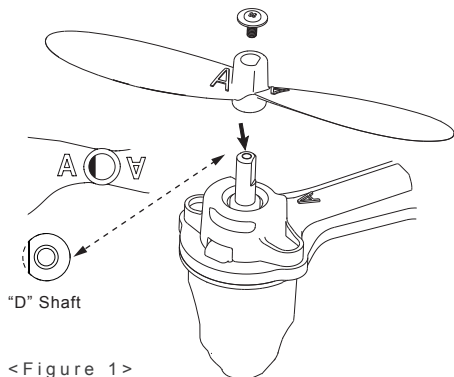


## Installing and removing propellers



**Installation:** Before installing propellers for the first time, please check that each Propeller A is matched with motor A and each Propeller B is matched with motor B. Align the "I" with the flat side of the "D" shaped motor shaft. Then use the provided screws and screwdriver to secure each propeller. Propeller A's are paired with black propeller screws and are tightened counterclockwise. Propeller B's are paired with silver propeller screws and are tightened clockwise. (as shown below)

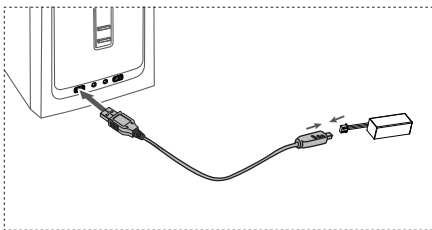
**Removal:** If propellers need to be changed, please uninstall as shown below with a screwdriver. Propeller A's are paired with motor A shafts and are untightened clockwise. Propeller B's are paired with motor B shafts and are untightened counterclockwise.



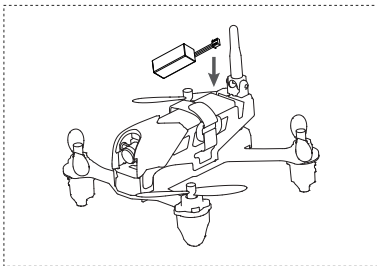
**Note:** Mind the differing colors of the A and B propeller screws!

## Charging and Installing the Aircraft battery

The H122D aircraft is paired with a rechargeable 7.6v, 710mAh Li-Po. Be sure to use the provided Hubsan dedicated charger for charging. Fully charge the battery before flight. Connect the charger's USB adapter to a PC terminal and then the battery to the charger. Charging time is approximately 130 min; recommended flight time is 6.5 minutes. Be sure to charge the battery before each flight.



Installation: Push the battery into its compartment with its lines facing away from the unit. Connect it to the drone's power line and coil the power line into the compartment. Be careful to avoid entangling the power line with the propellers.



## Frequently Asked Questions

### **1. Aircraft and remote control are not pairing**

- (1) Check that the aircraft and remote control are both powered on.
- (2) Turn off both the aircraft and remote control. Rebind the aircraft to the remote control by following the rebind directions on page 1 of this guide.

### **2. No video on the screen or user is experiencing strong video feed interference**

- (1) Check whether there are strong sources of wireless interference (i.e. WIFI, electricity, radio tower frequencies, etc). If there are any, please change your flight location.
- (2) Rebind the copter to the transmitter, as the 5.8 and 2.4 frequencies might be interfering with each other.
- (3) Browse through the selection of available 5.8GHz frequencies to find a clean channel.

### **3. Aircraft/video feed is shaking/shaky**

- (1) Check if the aircraft propellers are deformed or broken. Please replace them.
- (2) Check that all aircraft body screws are firmly in place.
- (3) Check whether any motor shafts are broken. Motors must be replaced if the shafts are broken.

### **4. Cannot take videos or pictures**

- (1) Check to see that the SD card is installed in the aircraft prior to power on.
- (2) Make sure the SD card is Class 10 or higher, contains 16GB or 32GB of storage and is formatted to FAT32.

## Disclaimer & Warning

All users must read product operating instructions as well as this liability disclaimer before using any Hubsan product. By using a Hubsan product(s), users are accepting the terms and conditions of Hubsan liability and operational guidelines. This product is not suitable for minors under 14 years of age. While operating a Hubsan product(s), users also accept all liability and responsibility for their own behavior, actions as well as any consequences resulting thereof while using a Hubsan product(s). These products may only be used for purposes that are proper and in accordance with local regulations, terms and any applicable policies/guidelines Hubsan may make available. Users agree to comply with these terms and conditions, along with any and all relevant policies/guidelines set forth by Hubsan.

## Limitation of Liability

Hubsan accepts no liability for damages, injuries or any legal responsibilities incurred directly or indirectly from the use of Hubsan products under the following conditions:

1. Damages, injuries or any legal responsibilities incurred when users are drunk, under the influence of drugs or anesthesia, dizzy, fatigued, nauseous and/or affected by other conditions both physical and mental that could impair sound judgment and/or personal ability.
2. Subjective misjudgment and/or intentional mis-operation of products.
3. Any and all mental damage, trauma, impairment, illness, compensation caused/solicited by accidents involving Hubsan products.
4. Product operation in no-fly zones (i.e. natural reserves).
5. Malfunctions or problems caused by modification, refit, replacement or use with non-Hubsan accessories/parts, failure to follow the guidance of the manual in assembly or operation.
6. Damages, injuries or any legal responsibilities caused by mechanical failures due to natural wear and tear (aircraft flight time clocking in 100 hours or above), corrosion, aging hardware, etc.
7. Continued flight after low voltage protection alarms are triggered.
8. Knowingly flying aircraft under abnormal conditions (such as when water, oil, soil, sand or other unknown material are inside the X4, the aircraft and/or transmitter are incompletely assembled, the main components have obvious faults, obvious defect or missing accessories, etc).
9. Flying in the following situations and/or environments: areas with magnetic interference (such as high voltage lines, power stations, broadcasting towers and mobile base stations), radio interference, government regulated no-fly zones, if the pilot loses sight of the X4, suffers from



poor eyesight or is otherwise unsuited for operating Hubsan products.

10. Aircraft use in or exposure to bad weather, such as a rain, wind, snow, hail, lighting, tornadoes and hurricanes.
11. Products are involved in/exposed to collisions, fire, explosions, floods, tsunamis, manmade and/or natural structure collapses, ice, avalanches, debris, landslides, earthquakes, etc.
12. The acquisition, through use of Hubsan products (specifically but not limited to aircraft), of any data, audio, video that results in infringement of law and/or rights.
13. Misuse and/or alteration of batteries, product/aircraft circuits, hardware protections (including protection circuits), RC model and battery chargers.
14. Any malfunction of equipment or accessory, including memory cards, that results in the failure of an image or video to be recorded or to be recorded in a way that is machine readable.
15. Users who engage in reckless, unsafe flying (with or without sufficient training).
16. Noncompliance with precautions, instructions, information and operation guidelines/methods given through official Hubsan website announcements, product quick start guides, user manuals, etc.
17. Other losses, damages, or injuries that are not within the boundaries of Hubsan responsibility.

## WARNING

1. This product complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This product also complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to the X4. Such modifications or changes could void the user's authority to operate the product.

NOTE: 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. If not installed and used in accordance with the instructions, it 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 with one or more of the following measures:

- √ Reorient or relocate the receiving antenna.
- √ Increase the distance between the aircraft and transmitter.
- √ Consult the product dealer or an experienced radio/TV technician for help.

2. Make sure that antennas are at least 20 cm away from people. The internal remote control USB interface and aircraft USB interface can only be connected using USB 2.0 and above. Do not connect to a USB power connector. Please use correct batteries, as the use of other types puts the device at risk of exploding. Follow guidelines for handling used batteries correctly. Hubsan guarantees that this product meets basic 19991/EC requirements, as well as some other relevant directives.

3. Please note that this product is intended for personal use and should never be used in a manner that infringes upon or contravenes international or domestic law and regulations.

You shall not use Hubsan products to:

- 1) Defame, abuse, harass, stalk, threaten or otherwise violate the legal rights (such as right of privacy and publicity) of others.
- 2) Photograph people on private property without their consent or photograph in areas where photography is prohibited without prior authorization.
- 3) Use Hubsan products for illegal or inappropriate purposes (such as for espionage, military operation, unauthorized investigation and unauthorized detection).

social habits.

- 4) Violate or disregard applicable laws, administrative rules and social customs.

**Please note:**

- 1) Filming or recording shows, exhibitions or other commercial buildings for private purposes may in some cases result in the infringement of intellectual property rights.
- 2) In some regions and countries, small aerial photography aircraft are prohibited from engaging in commercial activities.

If you encounter any problems that you can not resolve during the installation process, please contact an official distributor or Hubsan Technical Support. All intellectual property rights/copyrights of this product and its manual are owned by Shenzhen Hubsan Science and Technology Co., Ltd. No organization or individual may reprint, duplicate or publish in any form without prior written permission. If quoted or published, it shall be indicated that the source is Shenzhen Hubsan Science and Technology Co., Ltd., and shall not be inconsistent with the original source for reference, deletion and modification.

## Instructions

Some product flight functions are restricted in certain areas. Once you use this product, you are deemed to have read carefully the relevant ICAO regulations, local airspace control provisions and the regulations governing UAVs. You assume all liability for any non-compliance with the foregoing, are responsible for the consequences for your actions as well as any indirect and/or direct liability that arises as a result of these limitations.

## Flight environment requirements

- (1) Select an open environment devoid of high rise buildings and tall obstructions (such as trees and poles). Near buildings and obstacles, flight control signals and GPS signals can be severely weakened; GPS functions such as GPS mode and Return to Home may not function properly.
- (2) Do not fly in bad weather conditions (such as in wind, rain or fog).
- (3) Fly the drone in ambient temperatures of 0-40 °C.
- (4) When flying, please stay away from obstructions, crowds, high voltage lines, trees, water, etc.
- (5) To avoid remote control signal interference, do not fly in complex electromagnetic environments (such as venues with radio stations, power plants and towers).
- (6) The aircraft cannot be used in or near the Arctic circle or Antarctica.
- (7) Do not fly in no fly zones.
- (8) Do not operate the aircraft near high pressure lines, airports or areas with severe magnetic interference.

## **CAUTION**

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.



**Notice:** Read the instruction manual carefully before use.  
Propellers may cause injury; caution!

**Warning:**

Do not leave the quadcopter charging unattended. Always disconnect the quadcopter from the charger immediately after charging is complete.

This is not a toy and is not suitable for children under 14.

[www.HUBSAN.com](http://www.HUBSAN.com)

Product Name: X4 STORM

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User Manual