HUBSAN®

14+

PLEASE READ THE MANUAL CAREFULLY BERORE USE.

THE HUBSAN NANO Q4 SE

ITEM NO: H001

INTRODUCTION

Thank you for buying the HUBSAN products. It is designed as an easy-to-use, multi-functional RC model, capable of hovering, fast forward and acrobatic flight maneuvers. Please read the manual carefully and follow all the instructions. Be sure to keep the manual for future reference.

1. Safety Notes

1.1 Important Notes

This multi-functional RC model is not a toy.

In case of any injuries caused by improper operations, please read the instructions carefully before use. Be aware of your personal safety, safety of others and your surrounding environment. It is advised that beginners learn to fly the qudcopter under the guidance of professional.

1.2 Caution

Propellers work in high speed, which may cause dangerous. User will be responsible for any damages caused by improper operations.
Do not operate the quadcopter in crowds, buildings, airports or nearby high voltage cables.

1.3 Li-Po Battery Safety Notes

The quadcopter is powered by a Lithium-Polymer battery.
If you do not plan to use the products for a long time, store the battery approximately 50% charged to maintain battery performance and life.

⚠ Important

- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the local regulations.

⚠ SAFETY ADVISORY NOTICE
Lithium-Polymer (LiPo) Batteries

LiPo batteries are different from conventional batteries in that their chemical contents are encased in 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.

1.4 Prevent Moisture

The quadcopter contains many precision electrical components.
Store the battery and the quadcopter in a dry area at room temperature. Exposure to water or moisture may cause malfunction resulting in loss of control.

1.5 Proper Operation

For safety, pnly use Hubsan spare parts for replacement.

1.6 Always Be Aware of the Rotating Propellers

Be careful to keep your body away from the working propellers. Always keep the quadcopter fly in sight. If above mentioned happens, pwer off the quadcopter and the remote controller immediately.

1.7 Avoid Flying Alone

Beginners should avoid flying alone when learning flight skills.

2. Items in the Box

Check all the items in the box before use.

S/N	Part Name	Photos	Quantity	Remarks
1	Quadcopter		1PC	Equipped with 1pc of Li-Po Battery
2	Propellers		8PCS	Propeller A: 4pcs Propeller B: 4pcs
3	Remote Controller		1pc	Equipped with 2 X AAA (Not Included)
4	USB Charger		1pc	For recharging the Li-Po Battery
5	Manual		1PC	Quick Guide Instruction

3. Safety Check Before Flying

- Before flight, check the batteries of quadcopter and controller are fully charged
- Before power on the remote controller, check the throttle stick is fully down
- Check the quadcopter is in good condition, broken parts will cause a risk of injury
- Always power on the remote controller first, then quadcopter. After using, always power off the quadcopter first, then remote controller. Improper procedure may cause the quadcopter lose of control.

4. Charge the Li-Po Battery

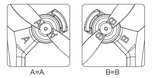
Connect the battery to the Hubsan USB charger, then connect the USB charger to USB devices, such as a computer or mobile power charger.

It takes around 30 minutes to fully charge the battery. The USB LED indicator is in red when charging and light off when the battery is fully charged. Please unplug the charger and battery when the charging is completed.
Flight time is around 5 minutes.

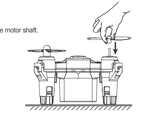
⚠ The battery should only be charged with the HUBSAN charger to avoid overcharge.

5. Propellers

(1) Attach the propellers to the corresponding motors that are marked A and B;

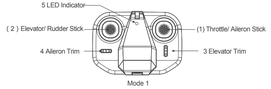


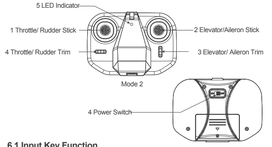
(2) Tighten the propellers to the motor shaft.



- Make sure that the A and B propellers are installed correctly. The quadcopter will not fly if propellers are improperly installed.

6. Remote Controller





6.1 Input Key Function

S/N	Mode/ Control	Function
1	Mode 2 Throttle/ Rudder Stick	Push the stick forward or backward and the quadcopter will ascend or decend; Push the stick left or right and the quadcopter will rotate left or right.
2	Mode 2 Elevator/ Aileron Stick	Push the stick forward or backward and the quadcopter will fly forward or backward;Push the stick left or right and the quadcopter will fly left or right.
(1)	Mode 1 Throttle/ Aileron Stick	Push the stick forward or backward and the quadcopter will ascend or decend; Push the stick left or right and the quadcopter will fly left or right.
(2)	Mode 1 Elevator/ Rudder Stick	Push the stick forward or backward and the quadcopter will fly forward or backward; Push the stick left or right and the quadcopter will rotate left or right.
3	Elevator Trim	Adjusts for forward and backward drift.
4	Aileron Trim	Adjusts for left and right drift.
5	LED Indicator	Blink in red before binding. Remain lighted in red after binding.
6	Power Switch	Turn on/off the remote controller.

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

6.2 Quadcopter Calibration

Quadcopter calibration is required when the quadcopter drifts during flight.
Land the quadcopter and place it on a horizontal surface for calibration.

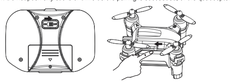
Calibrating Procedures:
Mode 2: Push the left stick to the bottom right, and move the right stick left to right quickly, the 4 LED indicators on quadcopter will blink alternately, calibration succeeded when the indicators stop blinking.
Mode 1: Push the left stick to the bottom right, put the right stick to the lowest and move left to right quickly, the 4 LED indicators on quadcopter will blink alternately, calibration succeeded when the indicators stop blinking.

7. Start to Fly

7.1 Power-On

The quadcopter is designed with Power-On safety system, it ensures the motors will not start undeliss safety signals detected.

7.1.1 Turn on/off the remote controller by pushing power switch to left/right.
Make sure the Throttle stick is in the full down position, power on the remote controller, then quadcopter. Do not push any sticks or trims before pairing is succeeded, or the quadcopter will drift.



7.2 Basic Flight

The manual will use Mode 2 as an example to illustrate the transmitter's operation.

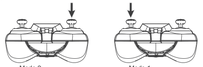
Transmitter (Model 2)	Quadcopter	Operation
	Up / Down	The throttle stick controls the ascent and descent. Push up the stick and the X4 will ascend. Pull down the stick and the X4 will descend. Move the throttle stick above the center position to take off. (Move the stick gradually to prevent the X4 from ascending too quickly.)
	Right Rotation / Left Rotation	The Rudder stick controls the rotate direction Push the stick to the left and the X4 will rotate counter-clockwise Push the stick to the right and the X4 will rotate clockwise. Pushing harder will cause the X4 to rotate faster in the corresponding directions.
	Forward / Backward	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 will fly backward. The angle of stick movement corresponds to the angle of tilt and flight speed.
	Right / Left	The Aileron stick controls left and right flight. Push the stick to the left and the X4 will fly to the left. Push the stick to the right and the X4 will fly to the right. The angle of stick movement corresponds to the angle of tilt and flight speed.

7.3 Headless Mode

Headless Mode means the quadcopter default any directions (corresponding to the directions of transmitter sticks) asits up head when the mode is activated.
2 front LED blink simultaneously when in Headless Mode.
Short press the Throttle stick for to enter/exit headless mode.
Short press the Throttle stick to enter into the headless mode, indicated by two"Beeps".
Short press the Throttle stick again to exit the headless mode, indicated by one"Beep".

8. ADVANCED PERFORMANCE SETUP

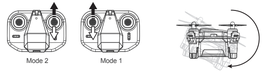
Normal Mode/ Expert Mode
The default setting is Normal Mode, and the Expert Mode can be activated to have a better sensitivity on the performance of the quadcopter.
Press the Elevator stick for 0.5 second to shift between Normal Mode and Expert Mode, indicated by "Beeps".



Aerial Flip Mode
Long press the throttle stick to enter into Flip Mode, indicated by "Beeps".
The "Beeps"will last for 2 seconds. In this 2 seconds, push the accordance sticks to perform the flips.

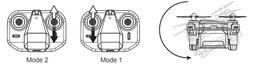
8.1 Forward Flip

Push the Elevator stick forward quickly. Release the stick to the center after flip.



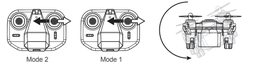
8.2 Backward Flip

Push the Elevator stick backward quickly. Release the stick to the center after flip.



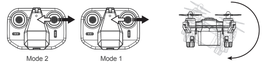
8.3 Left Flip

Push the Aileron stick to the left quickly. Release the stick to the center after flip.



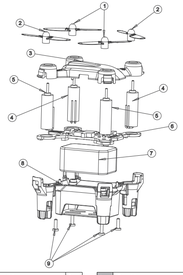
8.4 Right Flip

Push the Aileron stick to the right quickly. Release the stick to the center after flip.



⚠ Flip Mode is not available when battery is low.

3. Exploded View



S/N	Part Name	Qty
01	Propeller A	2
02	Propeller B	2
03	Upper Body Shell	1
04	Motor A	2
05	Motor B	2
06	PCBA	1

S/N	Part Name	Qty
07	Li-Po Battery	1
08	Lower Body Shell	1
09	Screw PA1.0*4	4

H001 SPARE PART LIST

H001-01 Body Shell Set | H001-02 Screw | H001-03 Propeller A | H001-04 Propeller B

H001-05 Motor A | H001-06 Motor B | H001-07 PCBA | H001-08 Li-Po Battery

H001-09 Remote Controller | H111-06A USB Charger

H001 TROUBLESHOOTING

1. Transmitter and Quadcopter can not pair
Throttle position needs to be fully down. Please do not move any sticks or trims during initial power-on binding.

2. Gyro not Working Well
1) Battery voltage is too low ;
2) Re-bind ;
3) Land the quadcopter on the ground with the throttle stick fully down, take off again after 3 seconds.

3. Unable to Flip
Li-Po power is too low, re-charge the battery.

4. Quadcopter is shaking or making noise during flight
Check if motors, bodyshells and propellers are all properly positioned or not;
Check if motors and propellers damaged or not.

5. Propellers work well, but cannot take off
1) Improper installation of the propellers. Check if the propeller A and propeller B installed correctly or not
2) Improper installation of motors. Check if motor A and motor B installed correctly or not.

6. One or more motors stop working
1) Check if propellers squeeze motors;
2) Resolder if there is any broken motor connections.
3) Replace the motor.

7. Drifts
Make calibration as instructed below:
1) Make sure propellers, motors and quadcopter all in good condition, and the battery is connected correctly with full power, bind the quadcopter and remote controller
2) Calibrating Procedures:
Mode 2: Push the left stick to the most right corner, and move the right stick left to right quickly, the 4 LED indicators on quadcopter will blink alternately, calibration succeeded when the indicators stop blinking.
Mode 1: Push the left stick to the most right corner, put the right stick to the lowest and move left to right quickly, the 4 LED indicators on quadcopter will blink alternately, calibration succeeded when the indicators stop blinking.

FCC Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help

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 including interference that may cause undesired operation

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