

# THE HUBSAN NANO Q4 SE

ITEM NO: H001

#### INTRODUCTION

Thank you for buying Hubsan Products. This specific model is a user friendly multi-functional RC quadcopter, and it is capable of hovering, 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 quad is not a toy.

To prevent any injuries caused by improper operations, please read the instructions carefully. Be aware of your personal safety, safety of others and your surrounding environment. It is recommended that beginners should learn to fly the quadcopter under the guidance of a more experienced user.

#### 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 near any high voltage cables

#### 1.3 Li-Po battery safety notes

The quadcopter is powered by a Lithium-Polymer battery.

If you plan to put the product away for some time, store the battery with approximately 50 percent to maintain battery life and performance.

The max. currency is 1.0A and the voltage is 5.0V when the Q4 battery is charged.

## **⚠** Important

- Risk of explosion if the battery is replaced by an unauthorized battery.
- . Dispose 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 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.

#### 1.4 Prevent moisture

The quadcopter contains many precision electrical components.

Store the product in a dry area at room temperature. Exposure to water or moisture may cause malfunction and result in loss of control.

#### 1.5 Proper operation

For safety, only use Hubsan spare parts for replacement.

# 1.6 Always be aware of the rotating propellers

Be careful to keep yourself away from the rotating propellers. Always fly the quadcopter in sight. To prevent any damage or harm, power off the quadcopter and the remote controller immediately.

## 1.7 Avoid flying alone

Beginners should fly under supervision.

# 2. Items in the Box

Check all the items in the box before use.

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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, make sure the batteries of the quadcopter and the controller are fully charged.
- Before powering on the remote controller, make sure the throttle stick is at the lowest position.
- Please power on the quadcopter first then power on the transmitter.
- · After operating the drone, you must turn off the quadcopter first then the transmitter.

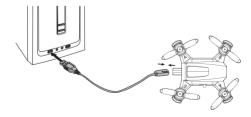
Wrong sequence could cause damage to the quadcopter and surroundings due to lack of control.

# 4. Charge the Li-Po Battery

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

It takes approximately 30 minutes to fully charge the battery. The USB LED indicator will stay red when it is charging and the indicator will be off when the batter is fully charged. Please unplug the charger and battery when charging is completed.

Flight time is around 5 minutes.

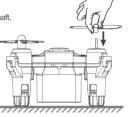


The battery should only be charged with the HUBSAN charger to avoid overcharge.

# 5. Propellers

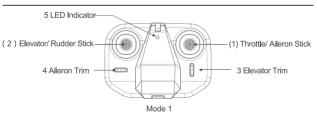
(1) Attach the propellers to the corresponding motors that are marked A and B: A = AR=R

(2) Tighten the propellers to the motor shaft.

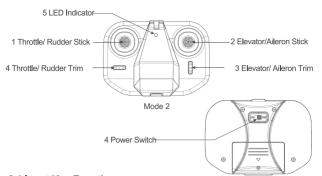


 Make sure that the A and B propellers are installed correctly. The quadcopter will not fly if propellers are improperly installed.

# 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 charge non-rechargeable battery.
- . Do not mix different types of batteries



# 6.2 Quadcopter calibration

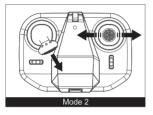
Quadcopter calibration is required when the quadcopter drifts during flight. Land the quadcopter and place it on a horizontal/flat surface for calibration.

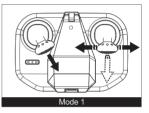
#### Calibrating procedures:

**Mode 2**: Push the left stick to the bottom right corner, and move the right stick from left to right quickly and repeat until the 4 LED indicators on quadcopter blink alternately.

Calibration is completed when the indicators stop blinking.

**Mode 1**: Push the left stick to the bottom right corner and put the right stick to the lowest position and move from left to right quickly and repeat until the 4 LED indicators on the quadcopter blink alternately. Calibration is completed when the indicators stop blinking.





## 7. Start to Fly

#### 7.1 Power-On

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

7.1.1 First power on the quadcopter, then pull the throttle stick to the lowest position and power on the transmitter. Before the quadcopter and the transmitter are successfully bound together, do not move the joysticks or press any of the buttons, otherwise the quadcopter could be unstable.







# 7.2 Basic Flight

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

The mandar will use wice	de 2 as an example to illustrate	c the transmitter 3 operation.
Transmitter (Model 2)	Quadcopter	Operation
	Down	The throttle stick controls the ascent and descent of the X4. Push the stick up to ascend the X4. Pull the stick down to descend the X4. Move the throttle stick above 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 rotation of the X4. Push the stick to the left and the X4 will rotate counterdockwise. Push the stick to the right and the X4 will rotate dockwise Pushing harder will cause the X4 to rotate faster in the corresponding direction.
	Forward	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	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 X4 will set the current direction as the default direction. When you choose a default headless mode, your X4 will always move to the left of that default direction when you pull your aileron stick to the left and move to right when you pull the aileron stick to the right regardless of where the drone is pointing at.

In headless mode, the 2 LED in the front will blink simultaneously.

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 increase the sensitivity of the remote control sticks.



#### Aerial Flip Mode

Long press the throttle stick to enter Flip Mode, indicated by a beep sound.

The beep sound will last for 2 seconds. Within this 2 second period, push the elevator stick to perform a flip.

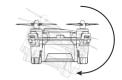
# 8.1 Forward flip

Push the elevator stick forward quickly then release the stick.







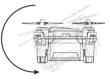


# 8.2 Backward flip

Push the elevator stick backward quickly then release the stick.





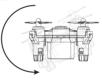


#### 8.3 Left flip

Push the elevator stick left quickly then release the stick.





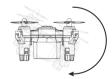


# 8.4 Right flip

Push the elevator stick right quickly then release the stick.



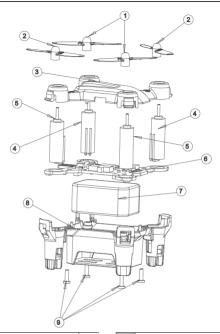








# 3. Exploded View



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
	07	07 Li-Po Battery 08 Lower Body Shell

# **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 cannot pair

Throttle stick needs to be at the lowest position. Please do not move or press the sticks and trims during the initial power-on binding.

## 2. Gyroscope not working.

- a) Battery voltage is too low.
- b) Re-bind.
- c) Land the quadcopter on the ground with the throttle stick at the lowest position and wait for 3 seconds then take off.

#### 3. Unable to flip

Battery voltage is too low.

# 4. Quadcopter is shaking or making noise during flight

Check if the motors, body shell and propellers are properly positioned, then check if the motors or propellers are damaged.

## 5. Propellers work well, but cannot take off

- a) Propellers were not installed properly. Make sure that propeller A and B are installed accordingly.
- b) Motors were not installed properly. Make sure motor A and B are installed accordingly.

#### 6. One or more motors stopped working

- a) Check if propellers were installed too tight.
- b) Re-solder if there are any broken/bad motor connections.
- c) Replace the motors.

## 7. The quadcopter is drifting

Calibrate as instructed below:

- a) Make sure the propellers, motors and quadcopter are in a good condition, the battery is fully charged and connected correctly and the quadcopter is bound to the remote controller.
- b) Calibrating procedures:

Mode 2: Push the left stick to the bottom right corner, and move the right stick from left to right quickly and repeat until the 4 LED indicators on quadcopter blink alternately. Calibration is completed when the indicators stop blinking.

Mode 1: Push the left stick to the bottom right corner and put the right stick to the lowest position and move from left to right quickly and repeat until the 4 LED indicators on the quadcopter blink alternately. Calibration is completed when the indicators stop blinking.

#### 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.

#### ENVIRONMENTALLY FRIENDLY DISPOSAL

Old electrical appliances must not be disposed of together with the residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free.

The owner of old appliances is responsible to bring the appliances to thise collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of horis substances.



# 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.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS



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