

R-RAPTOR HD

USER MANUAL



SHARE YOUR VISION

Thank you for choosing a PNJ product. This manual describes how to prepare and use your drone. It also provides information on the use and safety precautions, regulations, compliance and technical specifications of the drone. Please read it carefully and thoroughly before use, to familiarize yourself with all the features of the unit, to ensure the safe use of your drone and to take full advantage of it. Keep the manual for future reference. This manual is also available on the website www.pnj.fr under the category "User Manual".

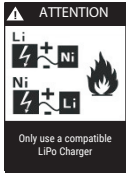
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LI-PO BATTERY

- By owning, charging or using the LiPo battery, you assume all risks associated with the use of lithium batteries.
- Always keep out of reach of children.
- Never leave the battery unattended while charging.
- Never leave the battery charged for more than 1 hour.
- Use only the USB charger provided in the pack. Never use a Ni-Cd or Ni-Mh charger.
- Before charging the battery, check that it is not damaged. Check that the battery has not swollen or that the battery compartment is not punctured. If you notice any of these situations: **DO NOT CHARGE THE BATTERY!**
- A used battery must be removed from the unit and replaced.
- If you notice that the battery starts to swell during charging, disconnect the battery immediately and do not use it again. Continued use of an inflated or deteriorated battery may cause an explosion.
- Make sure that the output voltage of the charger matches the battery voltage. Do not charge at a higher current than recommended. Use only the charger provided in the pack.
- Disconnect the battery from the charger if it becomes too hot (Never exceed 49 ° C / 120 ° F) or swells. If the battery becomes hot, disconnect the charger immediately.
- Charge only on non-flammable surfaces. Never charge inside a vehicle!
- Do not expose the battery to any source of heat or high temperature.
- Never put the battery in contact with water or immerse it in any other liquid.
- Improper use of the battery may cause fire, explosion or other hazards.
- In case of fire caused by the battery, do not use water to extinguish the fire (sand is recommended).

- Do not carry unwrapped batteries in your pocket or bag, as the shock of the batteries against each other could cause a short circuit.
- Store the battery in a dry place at room temperature.



WARNING / ATTENTION / WAARCHUWING

EN Please read the operation manual carefully before using the product
The english User Manual can be downloaded on our website: www.pnj.fr/en/user-manuals/
WARNING : LiPo batteies are dangerous, please follow the instructions to avoid injuries or damages.

FR Veuillez lire le "Manuel d'utilisation" entièrement et attentivement avant toute utilisation. Le manuel mis à jour est disponible sur notre site: www.pnj.fr/modes-demploi/
ATTENTION: Toutes les précautions d'utilisation concernant les batteries LiPo doivent être suivies rigoureusement. Une mauvaise manipulation de la batterie peut provoquer un incendie, une explosion, des blessures personnelles ou des dégâts matériels.

NL Lees de instructies in de bedieningshandleiding zorgvuldig door voordat u onze producten gebruikt
De bedieningshandleiding kunt u downloaden vanaf onze website: www.pnj.fr/en/user-manuals/
WAARSCHUWING : LiPo batterijen zijn gevaarlijk, het niet opvolgen van de gebruikshandekeiding kan verwondingen en schaden veroorzaken.

PRECAUTIONS FOR USE

Frequency used by the drone / controller is 2447MHz~2473MHz
Max transmission power: ≤20dBm

When using your drone, be sure to observe the following precautions:

- Suitable indoor and outdoor use in very windstill conditions.
- Not suitable for persons under 14 years of age.
- Minors must pilot under the supervision of an adult.
- Caution: risk of ingestion of small parts.
- Never use the appliance near children or pets.
- Be sure to use this product in a safe and responsible manner to avoid personal injury and / or property damage.
- Make sure that your use is in accordance with the legal provisions of the country where you are located.
- Find out about restrictions on the use of Wi-Fi frequencies in your flight location.
- check the weather conditions before use.
- Do not fly in rain, fog, wind or snow.
- Avoid contact with sand, dust, water, liquid substances or heat, it could cause irreversible damage.
- Keep away from obstacles, people, animals, dwellings, vehicles, high voltage cables or trees.
- Keep clear of the propellers. They can cause material or physical damage.
- Not suitable for people with epilepsy.
- Avoid excessive flying (risk of eyestrain or physical fatigue).
- Observe the safety instructions in this manual.
- Use only the accessories supplied by the manufacturer.
- Before each flight, check that the batteries are fully charged.

WARNING

The law requires you to use this drone in a sensible and responsible manner to avoid human or material damage. In the case of unauthorized use or for unlawful purposes, you will be held fully responsible for any damage caused. Be sure to respect the law, without infringing the privacy of others. PNJ assumes no liability for damage resulting directly or indirectly from the use of the product, any part of this product or this manual. PNJ cannot be held responsible for any accident, injury, death, loss or other claim of any nature whatsoever related to or resulting from the use of this product. All users must comply with the regulations of international organizations such as the International Civil Aviation Organization (ICAO) and the regulations of their own national airspace. To learn more about the rules in force in your country, visit the following sites:

ICAO - www.icao.int

PNJ - www.pnj.fr

DOWNLOAD THE APP

Please scan the QR code below to access to our website and download the APP. You can also type "R-Raptor HD" in the Google Play Store or the Apple Store to download the APP.



R-Raptor HD

FLIGHT ENVIRONMENT

1. Outdoor flight (not recommended): Fly at medium temperature, in sunny and windstill conditions.
2. Indoor flight (recommended): Ideal for indoor flight, choose a spacious place without obstacles, people or animals.

Note:

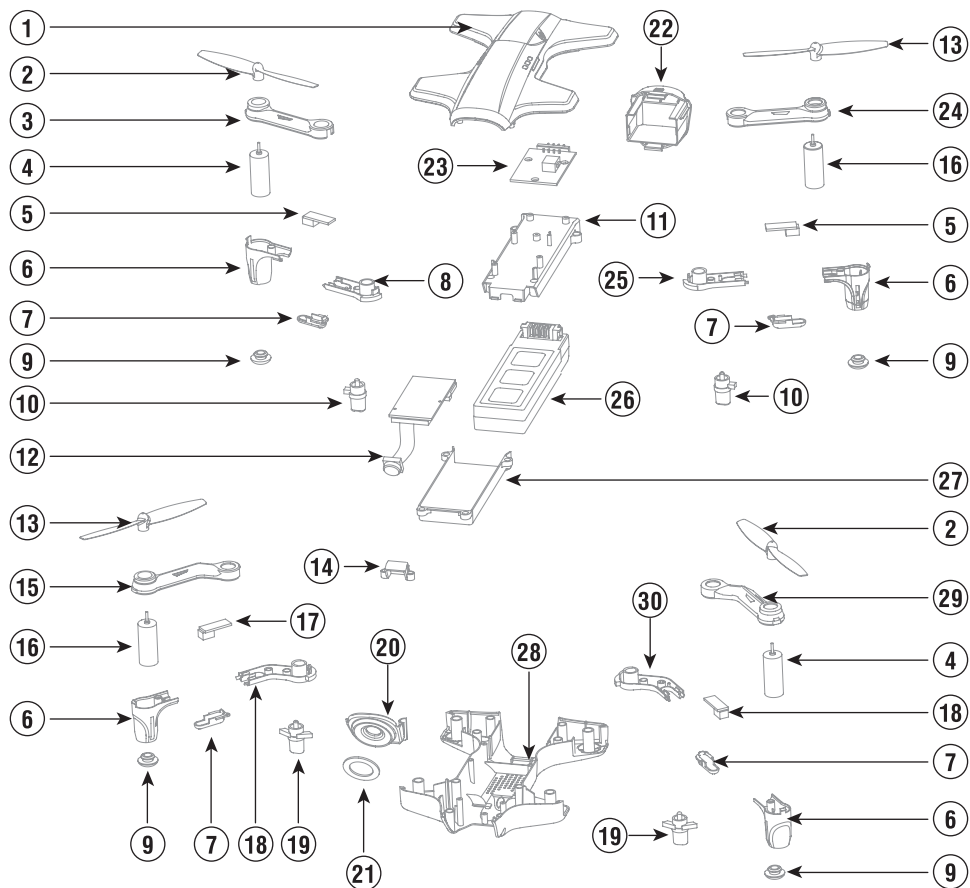
- Do not fly in extreme temperatures (very cold or very hot) as this could affect the flight performance of the drone.
- Do not fly in windy weather, flight performance and control of the aircraft may be impaired due to the wind. This could cause damage to you or to the unit.

INCLUDED IN THE PACK

Before using the product, please make sure that the accessories presented below are present in the contents of the pack.

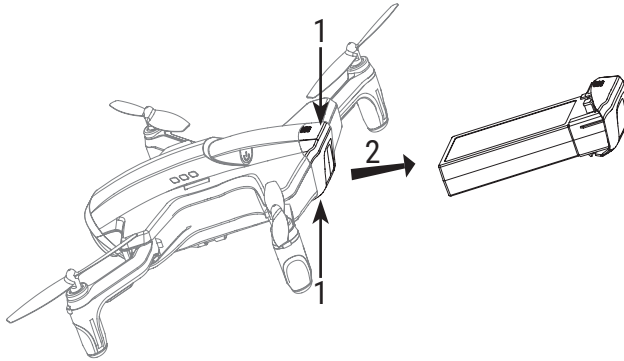
- 1x R-Raptor HD
- 2x Battery 7.4V 350mAh
- 4x Extra propeller
- 1x USB charger
- 1x Screwdriver
- 1x Wrench for Propellers
- 1x Instructions for use
- 1x Storage case

OVERVIEW



No.	Name	No.	Name	No.	Name
1	Drone cover housing	11	Battery upper holder	21	Camera lens
2	A Propeller (Clockwise)	12	Camera board	22	Drone bottom housing
3	Right rear bracket upper cover	13	B Propeller (Counterclockwise)	23	Receiver board
4	Clockwise Motor	14	Camera holder	24	Left rear bracket upper cover
5	Rear LED board (Red)	15	Right front bracket upper cover	25	Left rear bracket lower cover
6	Motor holder	16	Counterclockwise motor	26	Lipo battery set
7	LED hood	17	Front LED board (Green)	27	Battery lower holder
8	Right rear bracket lower cover	18	Right front bracket lower cover	28	Drone bottom housing
9	Cushion	19	Front bracket buckle	29	Left front bracket upper cover
10	Rear bracket buckle	20	Camera head cover	30	Left front bracket lower cover

HOW TO INSTALL AND CHARGE BATTERY



Pull Out the Battery

1. Press the clip
2. Gently pull out the battery.

Charge the Battery

3. Connect the USB Charger with the battery and connect the charger with a USB port or USB charging adapter.
4. Once successfully connected the LED light (on the charger) will turn red indicating that charging is in progress.
5. Once the battery is full the LED light will turn green.

Install the Battery

6. The battery can only be installed in one direction. Make sure that the metal connection (male) inside the drone are aligned with those of the battery (female). Push the battery carefully inside the drone until you hear the locking click.



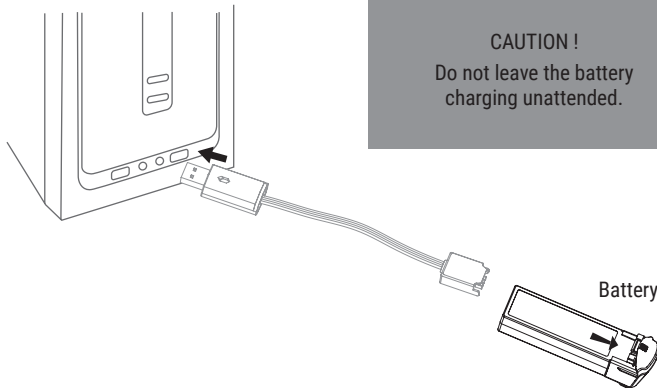
Powerbank



Computer



Adapter



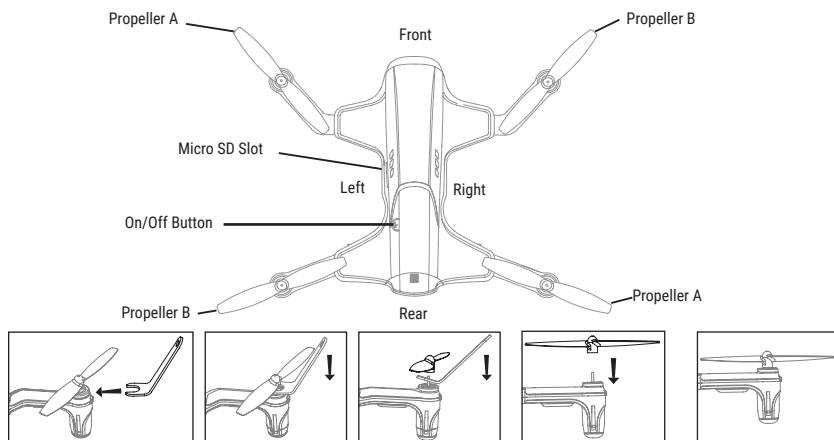
CAUTION !
Do not leave the battery
charging unattended.

WARNING

1. Make sure the voltage required for USB charging corresponds to the power source used.
2. The charger plug may overheat if overloaded. In this case disconnect the battery immediately to avoid an accident.
3. Do not let the battery charge unattended.
4. Do not use any charger or charging cable other than the one supplied with the drone.
5. Wait 30 minutes after a flight for the battery to cool before recharging.
6. Do not leave the battery in a fire, in the sun or in environments that are too hot.
7. Do not short-circuit the battery.
8. Keep the battery away from metal parts or magnets.

INSTALL THE PROPELLERS

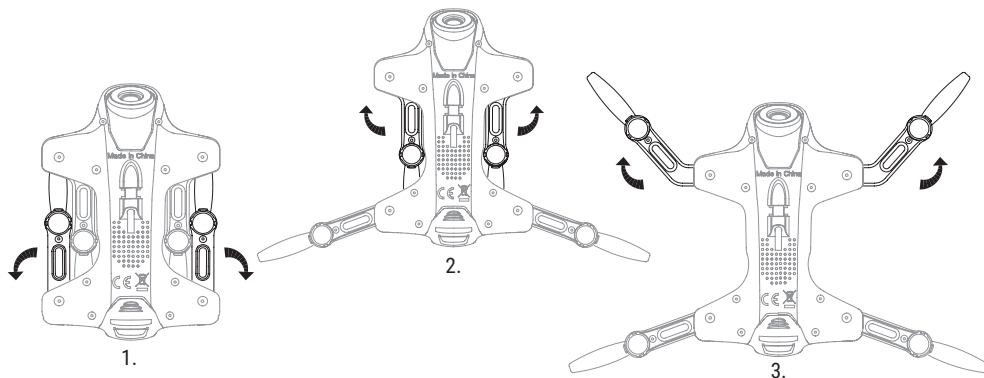
Please make sure to install the propeller correctly, the propellers are marked "A" and "B" refer to the picture below to learn the proper location of each propeller..Gently ease the propeller off of the metal shaft. Carefully push the replacement propeller onto the steel shaft and ensure that it is installed firmly. Be careful not to use too much force, which could damage the propeller or the drone.



FOLD THE DRONE

Please fold the drone in the following order:

1. Fold the front bracket first until you hear a "Click" sound
2. Fold the rear bracket last until you hear a "Click" sound. To unfold the drone please unfold the rear brackets first.



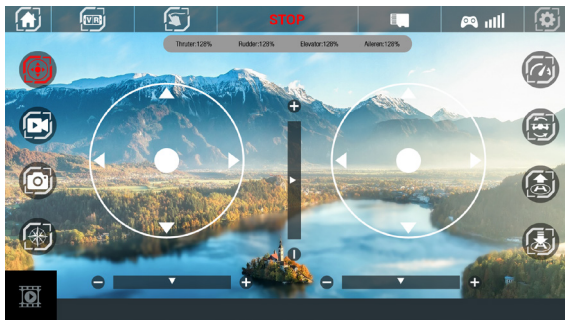
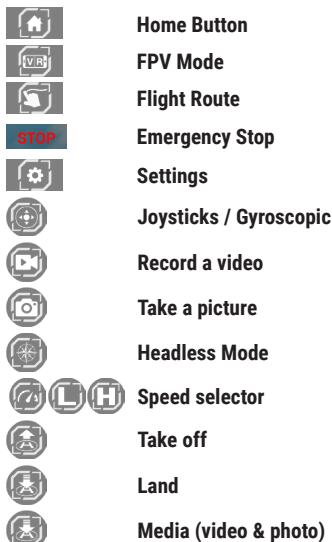
APP INSTRUCTIONS

1. The APP is suitable for mobile phone with iOS and Android system. Please search "R-Raptor HD" in the Apple Store or the Google Play Store to download the App (App icon page 3).
2. Press the On/Off button to switch on the drone and make sure the drone is on a flat surface.
3. Turn on the WiFi function on your mobile device and search for the following network:

Wifi Name: PNJ-R-RAPTOR-HD-XXXXXX,

4. Once connected to the drone. You can open the App and choose between: Démarrer (Start), Médias (Medias) or Menu Aide (Help).

CONTROL INTERFACE



EMERGENCY STOP

If the drone is too close to people, obstacles, animals please immediately press the Emergency Stop button in order to avoid any physical or material damage. Once you press the Emergency Stop button the motors will stop immediately and the drone will fall down to the ground straightly.

Tip: Do not use the emergency stop function unless in emergency situation.

SPEED SELECTOR

To select the flying speed of the Drone press the Speed Selector button on the screen and choose between “L” (Low Speed) and “H” (High Speed). By default, the drone is in Low Speed Mode

FLIGHT ROUTE

By pressing the “Flight path” icon, the right joystick disappears to make room for the flight path touch interface, draw with your finger the desired course / course. The R-Raptor HD will then follow this flight path (large spaces required)

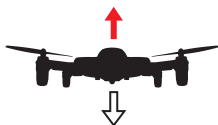
HEADLESS MODE

Press the Headless mode button to activate the “Headless mode”. In this mode if you press “Back” on the right joystick the drone will fly backwards in reference from when it started no matter which way the drone is facing. When activated this icon turns red. Press again to exit from Headless Mode, the icon will turn white.

START TO FLY

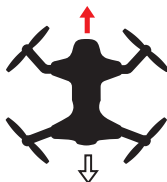
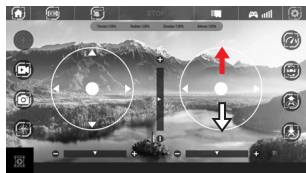
- 1 Place the drone on a flat surface and connect the battery. Press the On/Off button.
2. Make sure the drone is connected to your mobile device and open the App (page 6).
3. Press “Start” in the App Menu.
4. Press the Joystick / Gyroscopic button to choose between Virtual Joysticks control and Gyroscopic control.
5. The drone is now ready to take off, by pressing the Take Off button the drone
6. To land it, tap the “Landing” icon, the drone will land automatically.
7. Once you're used to R-Raptor HD at slow speed, feel free to change the speed or take pictures and videos.

USE TACTILES JOYSTICKS



LEFT JOYSTICK / Gas (elevation):

- Push up to climb
- Push down to go down



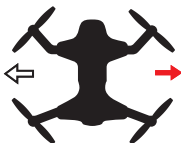
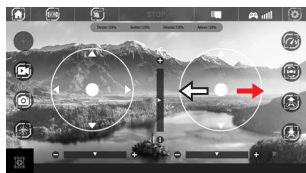
RIGHT JOYSTICK / Movement:

- push up to move forward
- push down to move backwards



LEFT JOYSTICK / Rotation:

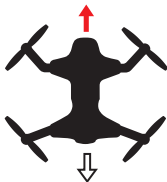
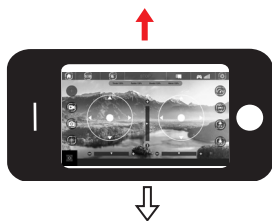
- Push left to rotate left
- Push right to rotate right



RIGHT JOYSTICK / Sideways Movement:

- Push left to move sideways to the left
- Push right to move sideways to the right

TILT CONTROL



LONGITUDINAL INCLINATION

• Smartphone tilting:

- Tilt forward to fly forward
- Tilt backward to fly backward

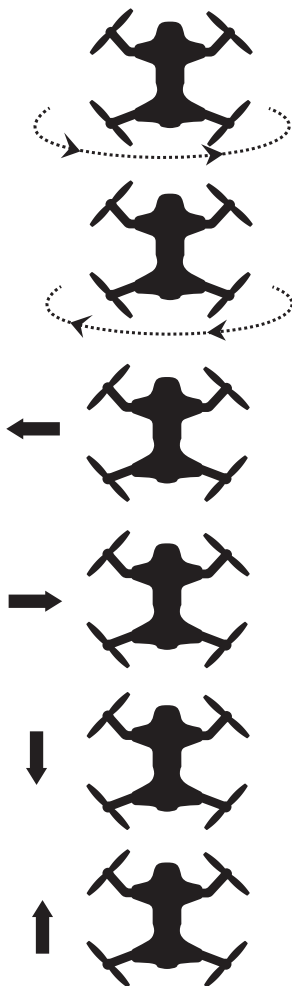


LATERAL INCLINATION

• Smartphone tilting:

- Tilt left to fly sideward to the left
- Tilt right to fly sideward to the right

FLIGHT ADJUSTMENTS



When the drone spins to the left:

Press right trimming button to adjust the drone rotation.



When the drone spins to the right:

Press left trimming button to adjust the drone rotation.



When the drone moves forward:

Press down trimming button to adjust the drone flying direction.



When the drone moves backward:

Press up trimming button to adjust the drone flying direction.



When the drone flies to the left:

Press right trim button to adjust the drone direction.

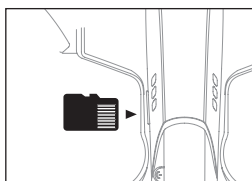


When the drone flies to the right:

Press left trim button to adjust the drone direction.

MEMORY CARD INSTALLATION

1. Please insert the memory card as shown below. Be sure to insert it in the same direction as the diagram below (memory card pins facing up).



3. To transfer your files from the memory card to your mobile device, enter "Media" from the main menu then press "Memory Card". Please select the files to import / transfer. Then press "Transfer"

2. Photos are saved on your mobile device as well as on the memory card. Videos are saved on the memory card only and must be imported via the "Transfer / Import" function.

MAINTENANCE

- The battery should be kept in a dry, ventilated place. The storage temperature is between 18 ° C and 25 ° C. Avoid excessive charging and discharging to prolong battery life. Be sure to charge the battery before storing it, if it is left unused for a long time.
- To avoid any problems, we strongly advise you to take the habit of also removing the battery of the drone when not in use.
- Keep your equipment in a dry place, away from water and heat. Do not place the drone on a wet surface or in the vicinity of liquid substances. This could cause irreversible damage.
- Maintenance can only be carried out by the After Sales Service of the warehouse or distributor. If you have a problem with your drone, please contact us directly. It is not recommended to change the engine or the motherboard on your own.
- Use only accessories specified by the manufacturer.
- Find all our products and accessories on our website www.pnj.fr

WARRANTY

This product is warranted for a period of 24 months from the date of original purchase by the consumer, except for certain wear parts, against manufacturing defects, upon presentation of proof of purchase (receipt with date, place of purchase, name of the product).

During the contractual warranty period, the defective product must be returned in its original packaging to the retailer's service center or to the www.pnj.fr website, depending on the place of purchase. After inspection of the product, the after-sales service will repair or replace the defective part or product, to the exclusion of any other compensation, if the product has been used correctly.

The warranty does not cover:

- The hull of the drone, propellers, propeller shields, landing gears, buttons, throttle and radio-control antenna, damaged or deteriorated as a result of a fall or accident, voluntary or involuntary.
- The battery charger when connected to a wall power supply (voltage too high).
- Products that have undergone unauthorized alterations, modifications, customizations or other assembly.
- Damage resulting from accidents, normal wear and tear, contact with liquid (rain, water, etc.).
- Defects due to alteration or deterioration of the product caused by a fall, accidental shock or immersion, voluntary or involuntary.
- Defects due to abnormal use of the product, installation of spare parts not in accordance with instructions in this manual or at www.pnj.fr.
- Damage resulting from a repair performed by the user themselves or an unauthorized third party, excluding exchange of spare parts provided by PNJ.
- Defects caused by parts not supplied by PNJ, including a battery not approved by PNJ. All products found to be defective after analysis will be returned to the shipper at their expense.

The spare parts necessary for the use of the product are available for 12 months, from the date of first commercialization of the product. Wear parts: Battery: 6 months / ESC: 6 months / Engines: 6 months

FRENCH LEGISLATION

While using the drone the safety of people and other aircraft is your responsibility. If you use your drone in France, as part of leisure activities, we remind you that it is essential to respect the following 10 principles to fly in accordance with the law:

1. I do not fly over people.
2. I respect the maximum flight heights.
3. I never lose my sight of the drone and I do not use it at night.
4. I do not fly my drone over public space in built-up areas.
5. I do not use my drone near aerodromes.
6. I do not fly over sensitive sites.
7. I respect the privacy of others.
8. I do not broadcast my footage without the agreement of the persons concerned and I do not use it commercially.
9. I verify under what conditions I am insured for the practice of this activity.
10. In case of doubt, I inquire.

Consult the guide on model aircraft on the website of the Civil Aviation Directorate General for more information on the conditions of use of recreational drones. For more information:

FR: <https://www.ecologique-solaire.gouv.fr/sites/default/files/R%C3%A8gles%20d'usage%20du%20drone%20de%20loisir.pdf>

EN: <https://www.ecologique-solaire.gouv.fr/sites/default/files/Rules%20for%20the%20proper%20use%20of%20a%20recreational%20drone.pdf>

The usage of a drone not complying with the rules enacted to ensure safety is punishable by one year of imprisonment and a fine of 75,000 euros under Article L. 6232-4 of transport code.

FLYING ASSOCIATION

Aeromodelling clubs are privileged places to use the flying miniature models. They are grouped together in national federations, where you can find more information on clubs near your home.

BELGIUM	FRANCE	HOLLAND
AAM Rue Montoyer, 1, boîte 1 1000 – Bruxelles	FFAM 108 rue Saint Maur 75011 PARIS Tél. 01 43 55 82 03	KNVvL Houttuinlaan 16A 3447 GM Woerden Tél. 0348-437060
http://www.aamodels.be/	http://www.ffam.asso.fr/	http://www.knvvl.nl/

RECYCLING



These symbols indicate that this product should not be disposed of with other household waste. Selective collection of electrical and electronic waste: Electrical products should not be disposed of with household products. According to the European Directive 2012/19 / EC for the disposal of electrical and electronic equipment and its execution in national law, used electrical products must be collected separately and arranged at collection points provided for this purpose. Consult local authorities or your dealer for recycling advice.

DECLARATION OF CONFORMITY



SAS PNJ, 110, Esplanade du Général de Gaulle 92400 Courbevoie, France, declares under its sole responsibility that the product described in this manual complies with the requirements of the R & TTE Directive 1999/5 / EC / RED 2014/53 / EU / RoHS 2011/65 / EU and Toy Safety Directive 2009/48 / EC.

A copy of the Declaration of Conformity is available at the following address:
www.pnj.fr/certifications

Date: 20/08/2017

Christian Pouthier, directeur produits SAS PNJ

TRADEMARK

All brands or product names are or may be trademarks of their respective owners. Pictures and specifications are not contractual. 1 year warranted. Made in PRC. Les marques citées sont des marques déposées par leur fabricant respectif. Photos et caractéristiques non contractuelles. Garantie : 1 an. Fabriqué en RPC. De vermelde merken zijn gedeponeerde merken door hun respectievelijke producent. Foto's en kenmerken niet contractueel. Geproduceerd in China. Garantie: 1 jaar. Die zitierten Marken sind durch die jeweiligen Hersteller eingetragene Marken. Fotos und technische Daten sind unverbindlich. Hergestellt in China. Garantie: 1 Jahr.

MODIFICATIONS

The explanations contained in this User Manual are provided for information purposes only and may be subject to change without notice. SAS PNJ can not be held responsible directly or indirectly for any prejudice or loss of data resulting from an error or omission in this document. SAS PNJ reserves the right to modify the product and its operating instructions without any restriction or obligation to inform the user. Thus, the purchased product may differ somewhat from that described in this document. The latest version of the online User Guide overrule over this one. To obtain it, go to: www.pnj.fr



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WWW.PNJ.FR

