VERSA

MINI BATTLE DRONE KIT

NX-DR10

USER MANUAL

NX® Tech

NX TECH IS A PROUD SAFETY ADVOCATE

Test your knowledge at knowyourDrone.gov.au

Be aware of local legislations and read the instructions carefully before using your drone. Keep yourself and others safe when flying your NX drone. Always fly your drone within visual line-of-sight and only fly one drone at a time. **DO NOT** not allow your view of the drone to be impaired, for example, in rain, wind, snow, fog or low light. When flying your drone, please keep in mind the safety and privacy of others.

DO NOT get your Drone wet, dusty or sandy. **DO NOT** touch your Drone while it is powered on and when the rotor blades are turning.

For replacement parts batteries, blades and accessories please visit your nearest NX retailer or visit **www.nx-tech.com.au** or **www.nx-tech.co.nz**

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1.0 WELCOME

Thank You for purchasing the NX Tech NX-DR10 Versa Mini Battle Drone Kit. Please take the time to read the following safety warnings and operating instructions carefully. In this document, the NX-DR10 Versa Mini Battle Drone Kit will be referred to as the "Drone".

1.1 BEFORE FLYING THE DRONE

We recommend that you read **Section 3.0 "BATTERY SAFETY"** before you start to charge the Drone battery and fly your NX Tech Drone.

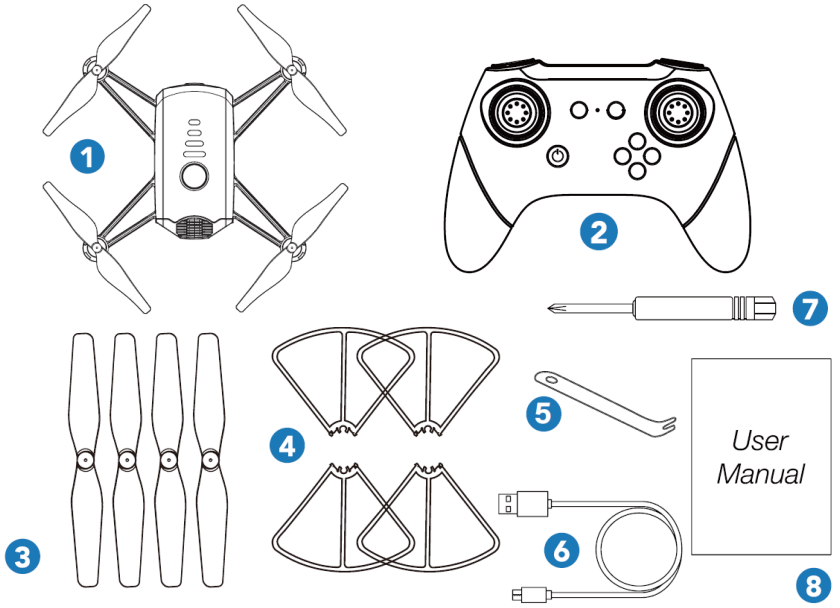
1.2 GENERAL SAFETY

Please familiarise yourself with your local Drone legislation regarding its usage before you begin using your NX Tech Drone. Included in the package contents of your Drone are the Australian CASA guidelines. Please adhere to your local Drone legislation and make sure that you are using your Drone within the parameters of these laws. NX Tech takes no responsibility for operation of this product outside of what is legally permissible in your area.

- **DO NOT** fly your Drone any closer than 30 metres from people, animals or buildings.
- Check to make sure you are no closer than 5.5 kilometres from any airfields or airports. For more information on CASA's Australian legislation visit: www.casa.gov.au
- You must not fly your Drone higher than 120 metres above the ground.
- Only fly during the day and keep your Drone within your line-of-sight.
- For Drone information outside Australia, please visit the website of your local aviation authority.
- **DO NOT** attempt to modify the Drone or any of its components in any way, as doing so will void your warranty and may affect the operation of the Drone.
- **DO NOT** use the Drone in any conditions that could affect or damage your Drone. Wind, sand and dust can damage the components of your Drone.
- Please **DO NOT** attempt to touch the Drone when the remote control is powered on, or while the rotor blades are turning.
- When flying your Drone, please keep in mind the privacy of others.

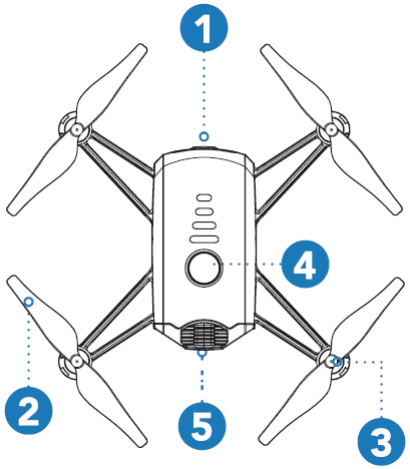
2.0 PRODUCT CONTENTS

1. NX-DR10 Battle Drones x 2
2. Remote Controls x 2
3. Rotor Blades x 8
4. Rotor Guards x 8
5. Rotor Replacement Wrenches x 2
6. USB Charging Cables x 2
7. Small Screwdrivers x 2
8. User Manual x1



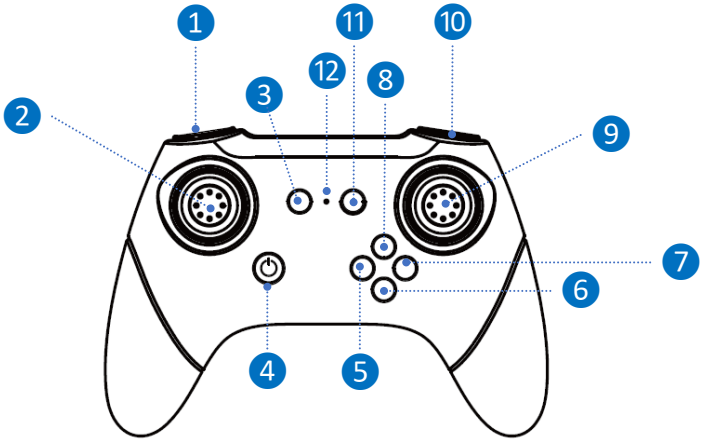
2.1 PRODUCT OVERVIEW

1. Infrared Emitter
2. Rotor Blade
3. Motor
4. Power Button
5. Battery Release Button



2.2 REMOTE CONTROL OVERVIEW

1. Speed/Surround Button
2. Left Control Stick (Ascent, Descend, Yaw Left, Yaw Right)
3. One Key Take Off/Landing (Emergency Stop)
4. Power On/Off
5. Trim Left
6. Trim Reverse
7. Trim Right
8. Trim Forward
9. Right Control Stick (Forward/Reverse, Left/ Right)
10. 360° Flip/Headless Mode
11. Fire Button
12. LED Power Indicator



IMPORTANT INFORMATION - PLEASE READ BEFORE USE

3.0 BATTERY SAFETY

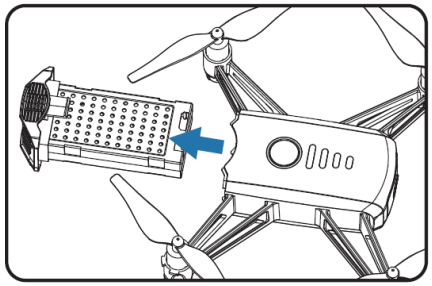
When handled incorrectly, Lithium polymer batteries can be dangerous and can potentially harm and do damage to persons and/or property. NX Tech does not accept any liability for damage to persons or property if the battery is not correctly charged, stored or protected.

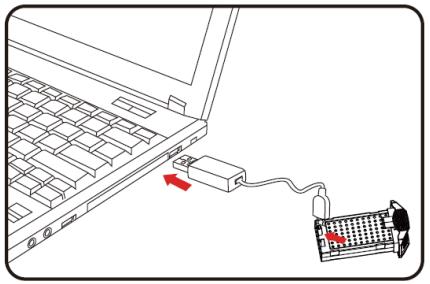
These are our suggestions to keep safe:

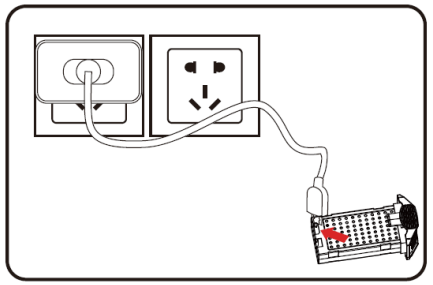
- Always unwind all cables before charging.
- **DO NOT** overcharge the battery. Once the charging process is completed, remove the battery from the charger.
- Only use the included or replacement NX-DR10 Drone chargers and batteries.
- You must charge the Lithium polymer battery in a safe area away from flammable materials.
- The battery is only to be charged under adult supervision. Do not leave charging batteries unattended. You should always remain in constant observation to monitor the charging process and react immediately to any potential problems that may occur.
- **DO NOT** charge the battery in temperatures higher than 40°C or lower than 0°C.
- **DO NOT** cover the batteries when charging or expose them in direct sunlight.
- After each flight and/or crash, please check battery for any damage or swelling.
- If the battery is damaged, leaking, making noises, punctured or malformed in any way, **DO NOT** attempt to use it. Please dispose of the battery immediately and safely in the correct manner.
- **DO NOT** bend, puncture, crush or scratch the Drone's battery.
- **DO NOT** store batteries in your pockets, on your body or in extreme temperatures.
- After flying/discharging the battery, ensure that it is cool to ambient/ room temperature before recharging.
- If at any time during the charge or discharge process the battery begins to balloon or swell, discontinue charging or discharging immediately. Quickly and safely disconnect the battery, then place it in a safe, open area away from flammable materials to observe it for at least 15 minutes. **Continuing to charge or discharge a battery that has begun to balloon or swell can result in a fire.** A battery that has ballooned or swollen to even a small amount must be removed from service completely.
- Never plug in a battery and leave it to charge unattended overnight.
- Non-compliance with the above warnings may result in the failure of the battery and become a dangerous hazard.

3.1 CHARGING THE DRONE BATTERY

1. Press the buckle and pull the battery out from your Drone.
2. Connect the Drone battery to the supplied USB charging cable. The light on the USB will turn red while charging. The light on the USB will turn off once charging is complete.
3. Once the battery is in a low power state, the green power indicator of the Drone will start to blink. At this time, please land immediately and charge the battery to avoid unnecessarily losing your Drone.
4. To keep the battery life as long as possible, avoid removing the battery from the charging cable before charging is complete. If you have just finished flying your Drone, please allow the battery to cool down for at least 30 minutes before recharging.







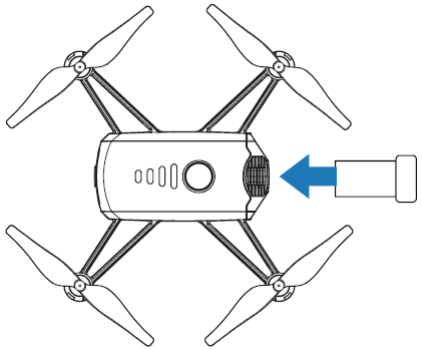
5. The Drone battery may take up to 60 minutes to fully charge. If the battery has been on charge for any longer than 1.5 hours and the indicator on the charging cable is not showing that the battery is charged, please remove the battery from the USB charger.
6. When the Drone battery has finished charging, it is advised that the USB cable is removed from the battery as soon as possible.
7. Overcharging will damage the battery and affect flight time.

4.0 SETTING UP THE DRONE

4.1 INSTALLING THE BATTERY IN YOUR DRONE

Once the Drone battery is in a low power state, the green power indicator of the Drone will start to blink. Land your Drone immediately and charge the Drone battery to avoid losing the Drone

1. Ensure that the battery is fully charged.
2. Insert the battery into the rear of the Drone in the correct orientation. The tab on the battery should be facing up.
3. Slide the battery in all the way until it securely slots into place.
4. Press down the battery lock before inserting and when removing the battery.

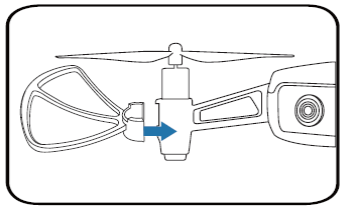


NOTE:
Do not force the battery. If the battery does not fit into position, please check that you have installed the battery in the correct orientation.

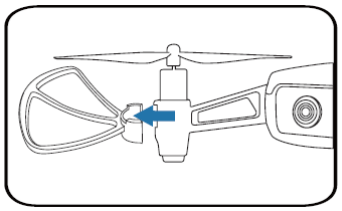
4.2 INSTALLING ROTOR GUARDS

Installing the rotor guards is optional. However installing them will protect your rotor blades and motors against bumps and light crashes.

1. To install the rotor guards, please insert the rotor guard into the landing feet of the Drone.

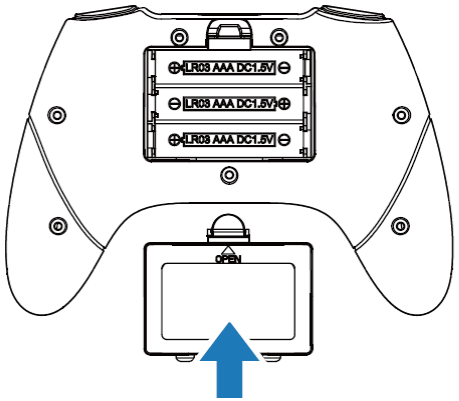


2. To remove the rotor guard, please hold the Drone's arm first, and then remove the rotor guard.

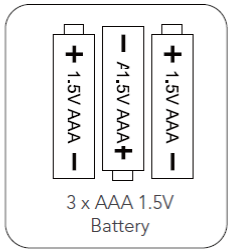


4.3 INSTALLING THE BATTERY IN YOUR REMOTE CONTROL

1. Remove the battery cover at the rear of the remote control by sliding it downward.



2. Insert 3 x AAA-size batteries (not included) and make sure that they are in the orientation specified.



NOTE:
Do not mix new and old batteries.

4.4 FLIGHT SAFETY

Before flying your Drone, make sure that you are in a safe setting. CASA restrictions regarding flying Drones require the Drone to be no closer than 5.5 kilometres from any airport or airfield while flying. Drones should also not be flown over populated areas or any closer than 30 metres from vehicles, people or animals. It is also required that you check your surroundings before taking off by making sure there are no obstacles or dangers in the area including overhead power lines and large bodies of water. If there are hazards present in your intended area of flight, please find an alternative location.

NOTE:
Please fly the drones in open spaces to avoid hitting obstacles and other objects and to prevent damage to the drones.

4.5 SYNCING (PAIRING) THE DRONE

1. Press the ON/OFF button at the top of the Drone to turn it on. The LED light on the Drone will blink a green colour.
2. Turn on the remote control. The remote control will make a beeping sound and the LED indicator of the remote control will blink red.
3. Push the left control stick upwards for **one second** and then push the left control stick downwards for **one second** (Fig 1). The remote control will beep, and the LED light on the Drone will stop blinking. The LED will change to solid green, this means that the Drone and the remote control is now paired successfully.
4. Place the Drone on a flat surface and hold the left and right control sticks outward and downward (left stick 7 o'clock and right stick 5 o'clock positions) for 3 seconds. The indicator on the Drone will change from a solid to quick flashing light. When the LED light on the Drone turns solid again, this means that the Drone has been calibrated successfully. (Fig 2).

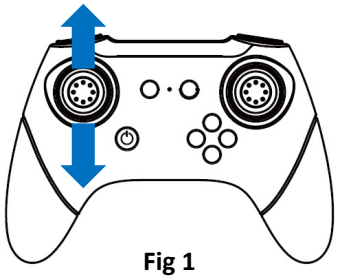


Fig 1

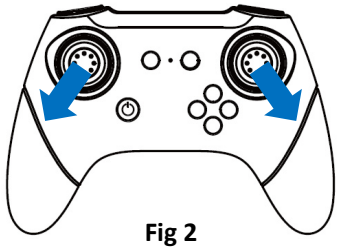


Fig 2

NOTE:
- Please repeat Step 4 before every flight.
- Please complete the pairing process within 5 metres of the Drone to avoid interference with other signals.

4.6 DRONE IS READY FOR TAKE OFF

Please ensure that the Drone is placed on a flat surface and away from any obstructions. There are two methods to begin flying your Drone:

1. Press the One Key Take Off/Landing button (Fig 3)
2. Press the Left and Right Control Sticks inwards and downwards (left stick 5 o'clock and right stick 7 o'clock positions) (Fig 4) for **3 seconds**. The Drone blades will start rotating and the Drone is ready to fly by pushing the Left Control Stick upwards (Fig 5)

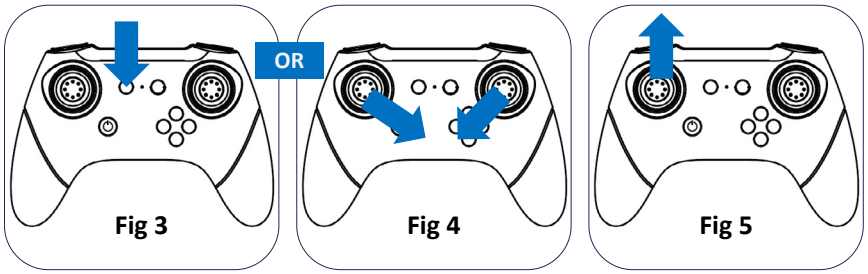
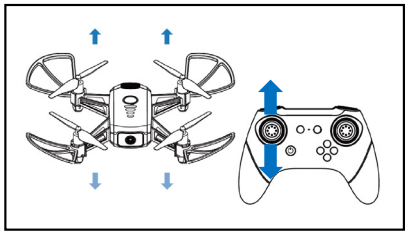


Fig 3 Fig 4 Fig 5

5.0 FLYING THE DRONE

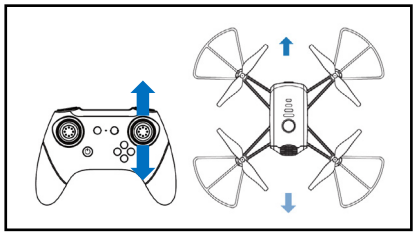
5.1 BASIC FLIGHT

UP AND DOWN



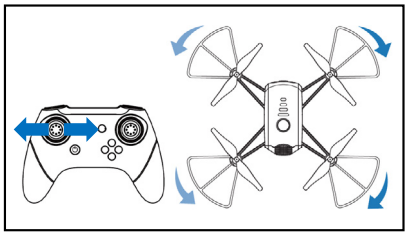
Push the left control stick up to gain altitude, and down to descend.

FORWARD AND REVERSE



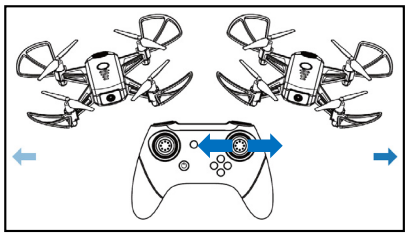
Push the right control stick up and down to fly forward or reverse respectively.

ROTATION



Push the left control stick left and right to turn left or right respectively.

LEFT/RIGHT FLIGHT



Push the right control stick left and right to fly left or right respectively.

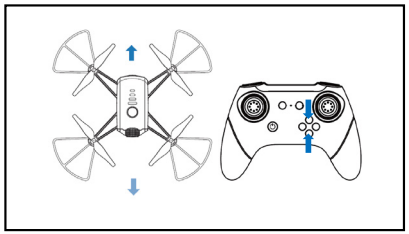
NOTE:
The Drone has a maximum flight range of 50 metres in open, unobstructed terrain.

5.2 TRIM FUNCTION

Trimming is used to balance out your Drone if it is drifting when flying. To adjust the Trimming, please follow the steps below. **You can only use the Trim function when the Drone is airborne.**

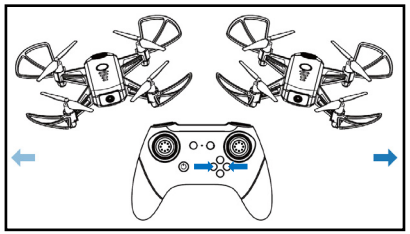
1. Make sure that the remote control and Drone are switched on and correctly paired.
2. You can now adjust your trim by pressing the Left/Right and Forward/Reverse button on your remote control. Please refer to the images. Press one time for trim. Stop pressing the trim button if the Drone is stable.

TRIM FORWARD/REVERSE



When the Drone is hovering in place, and starts to drift forward, press the Reverse Trim button until the Drone is stable. If its drifts backwards, press the Forward Trim Button until the Drone is stable.

TRIM LEFT/RIGHT

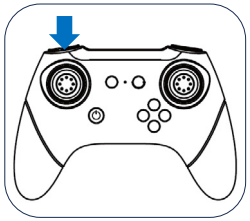


When the Drone is hovering and starts to drift to the side, push the Left/Right Trim Button until the Drone is stable.

5.3 SPEED MODE

The Drone has 3 speed modes.

To cycle through the speed modes, use the Speed Button at the top left of the remote control. Each mode will be identifiable by a series of beeps.

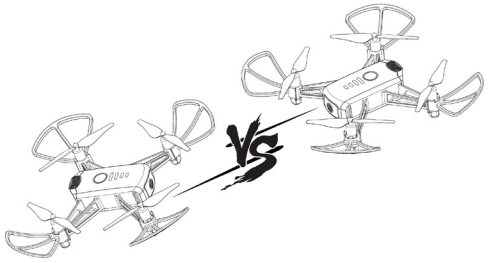


- Low Speed Mode (Default): One beep.
- Medium Speed Mode: Two beeps.
- High Speed Mode: Three beeps.

NOTE:
For beginners, it is suggested to operate the Drone at **Low Speed**.

5.4 BATTLE FUNCTION

Two players are required for an aerial drone battle. In a battle game, each player controls a Drone with the objective of firing at and shooting down the opponent's Drone with the infrared beam emitter located at the front side of the Drone.



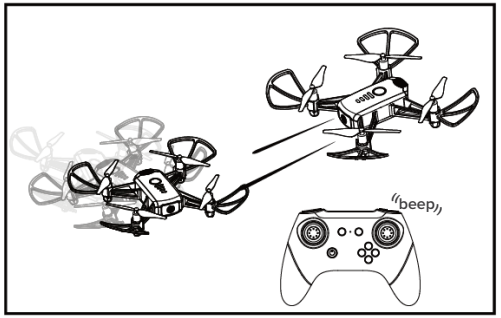
Each Drone can receive 4 hits before it is forced land to recover for the next battle. The IR beam range is effective up to 8 metres.

The Drones fly using 2.4GHz frequencies and are suitable for indoor and outdoor flight. However, the infrared beam is more suited for indoor battles if sunlight is too bright and causes interference.

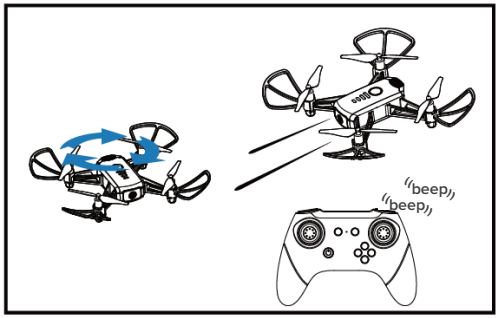
Use the Fire Button to hit your opponent's Drone while flying through the air.

Each time a Drone is hit, it will perform an automated action and the player's remote control will beep in an automated pattern to acknowledge the hit.

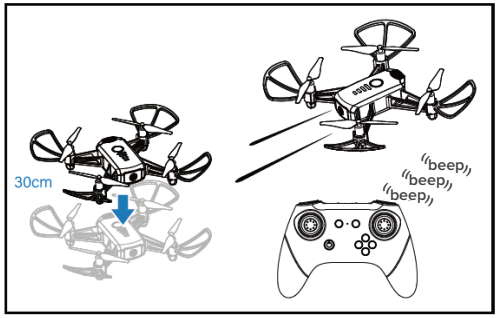
The **first** time your Drone is hit, it will wave and wobble and then resume normal function. Both remote controls will also beep once.



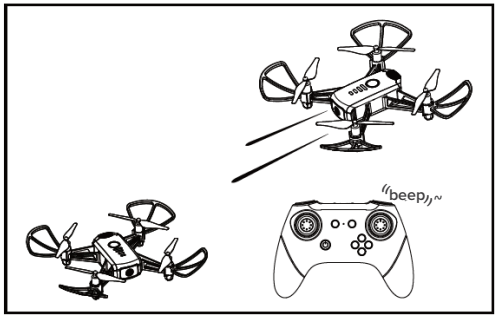
The **second** time your Drone is hit, it will rotate around its vertical axis twice and then resume normal function. Both remote controls will beep twice.



The **third** time your Drone is hit, it will drop about 30cm from its existing position. Both remote controls will beep 3 times.



The **fourth** time your drone is hit, it will descend and land. This indicates that the battle is over. Both remote controls will sound out long beeps.

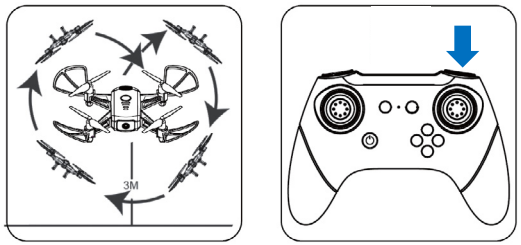


To restart a new battle game:

1. Turn off both remote controls and Drones. Then turn them back on again.
2. Perform an auto trim/reset function for each Drone and restart. Refer to Step 4 under **Section 4.5 SYNCING (PAIRING) THE DRONE**.

5.5 360º FLIP

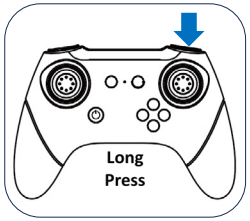
Fly the Drone to a height of more than 3 metres, and then press the 360° Flip Button at the top right of your remote control. Then immediately push the Right Control Stick to the direction that you want to flip your Drone.



NOTE:
The 360° flip works better when the battery is fully charged.

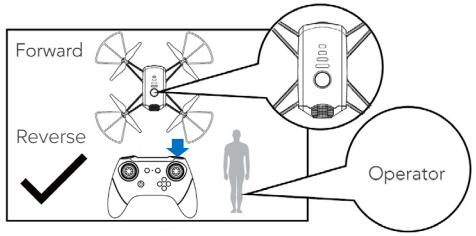
5.6 HEADLESS MODE

When Headless Mode is enabled, the Drone will move in the direction set by the remote control stick, regardless of its orientation. This makes it easy to bring the Drone home when it is far away from you. To ensure that Headless Mode works well, please use the correct take off position. The head of the Drone must point in the intended direction of flight and the back of the Drone should be facing the pilot. See below instructions.

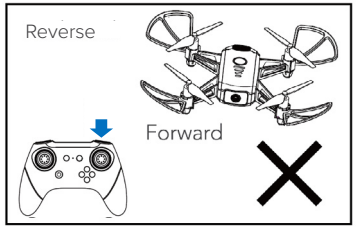


Long press the Headless Mode Button on the remote control (shown in the diagram). The remote control will beep once indicating that the Headless Mode has been enabled. To end Headless Mode, long press the Headless Mode Button again and the remote control will beep accordingly.

CORRECT TAKE OFF POSITION

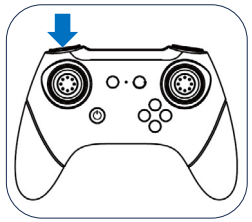


INCORRECT TAKE OFF POSITION



5.7 ONE KEY SURROUND

1. While the Drone is in flight, long press the Surround Button on the remote control. The remote control will beep once and the Drone will fly in a wide circle from its current location twice.
2. Long press the Surround Button again to cancel or push the Right Control Stick in any direction to stop this function.



NOTE:
It is highly recommended that you push the Surround Button only when you are aware that it is safe for the Drone to reverse.

5.8 EMERGENCY STOP

While the Drone is airborne and an emergency stop is needed, long press the One Key Take Off/Landing button. The rotor blades will lock and the Drone will fall to the ground.

NOTE:
It is highly recommended that you **DO NOT** push this button unless it is an emergency.

6.0 DRONE MAINTENANCE

Avoid exposing your Drone and its accessories to dust, sand and moisture as these can damage the Drone. If the Drone is exposed to dust or sand, use a soft brush to remove any visible particles.

6.1 REPLACING ROTOR BLADES

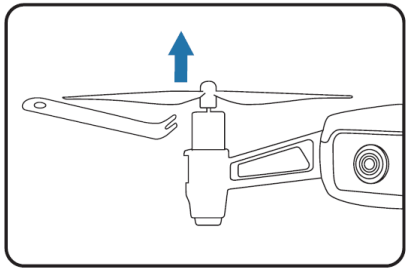
If the rotor blades become damaged or the Drone is no longer flying straight, the rotor blades may need to be replaced.

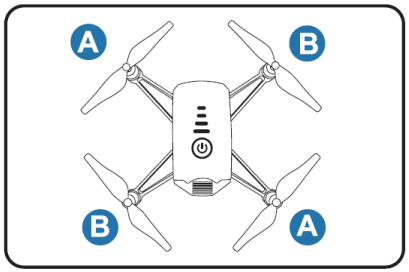
There are two types of rotor blades included with the Drone, A blades (clockwise rotation) and B blades (counter clockwise rotation). The blades are marked on top showing either A or B.

It is important that the rotor blades are installed correctly on the designated motors. If not, the Drone may not fly and you could potentially burn out the Drone's motors.

To remove and replace the rotor blades, please follow the instructions below.

1. Place the rotor replacement wrench under the rotor blade and press the handle to lift the rotor blade.
2. Remove the rotor blade from the Drone.
3. Please ensure you identify and match the correct blade with the motor as shown below and press the new rotor blade on the motor axis and make sure that it is attached firmly.





NOTE

- It is important that the correct rotor blades are installed on the designated motors. If they are installed incorrectly, the Drone will not fly and you could potentially burn out the Drone's motors.
- When replacing multiple rotor blades, please replace the blades one at a time to avoid any confusion in re-attaching the rotor blades.

7.0 TROUBLESHOOTING

Problem	Reason	Solution
The Drone is not responding and the light on it is blinking.	**1.** Drone battery level is low **2.** The Drone did not pair successfully with the remote control.	**1.** Please charge the Drone battery. **2.** Refer to **Section 4.5 SYNCING (PAIRING) THE DRONE**.
The Drone is unstable during flight.	**1.** The Drone did not pair with the remote control on a flat surface. **2.** The Drone has crashed into something. **3.** The rotor blades are damaged.	**1.** Refer to Step 4 under **Section 4.5 SYNCING (PAIRING) THE DRONE**. **2.** Refer to Step 4 under **Section 4.5 SYNCING (PAIRING) THE DRONE.** **3.** Replace with new rotor blades.
The Drone's rotor blades spin but the Drone does not take off.	The rotor blades are incorrectly installed on the wrong motors.	Install the correct rotor blade on the designated motor.
The remote control emits a constant beeping sound.	The remote control battery level is low.	Replace with new batteries for the remote control.
The Drone is wobbling while in flight.	The rotor blades are not properly installed and aligned with the designated motors.	Ensure that the rotor blades are properly attached and aligned with the designated motors by pressing them down firmly during installation.

NOTE:
Do not attempt to remove the motors from the arms as this will damage the Drone permanently.

8.0 WARRANTY TERMS AND CONDITIONS

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is provided in addition to your rights under the Australian Consumer Law. Directed Electronics Australia Pty Ltd (Directed Electronics) warrants that this product is free from defects in material and workmanship for a period of 12 months from the date of purchase or for the period stated on the packaging. This warranty is only valid where you have used the product in accordance with any recommendations or instructions provided by Directed Electronics.

This warranty excludes defects resulting from alterations of the product, accident, misuse, abuse or neglect. In order to claim the warranty, you must return the product to the retailer from which it was purchased or if that retailer is part of a National network, a store within that chain, along with satisfactory proof of purchase. The retailer will then return the goods to Directed Electronics.

Directed Electronics will repair, replace or refurbish the product at its discretion. The retailer will contact you when the product is ready for collection. All costs involved in claiming this warranty, including the cost of the retailer sending the product to Directed Electronics, will be borne by you.

Email: admin@NXtech.com.au

8.1 INDEMNITY

You agree to defend, indemnify and hold harmless NX Tech and its subsidiaries and affiliates from and against any and all claims, proceedings, injuries, liabilities, losses, costs and expenses (including reasonable legal fees), including but not limited to, claims alleging negligence, invasion of privacy, copyright infringement and/or trademark infringement against NX Tech and its subsidiaries and affiliates, relating to or arising out of your breach of any provision of these terms, your misuse of NX Tech products, parts or its services, or your unauthorised modification or alteration of products or software.

8.2 WARRANTY AND WARRANTY DISCLAIMER

NX Tech has a limited warranty, whereby NX Tech warrants to you and only to you that this NX Tech product will be free from defects in materials and workmanship for one (1) year from the date of your purchase (unless a longer warranty period is required by law). The specifics of this NX Tech limited warranty are covered in this manual.

To the extent possible under governing law, other than the above product warranty for the NX Tech product you understand and agree that the NX Tech services are provided on an “as is” and “as available” basis.

NX Tech makes no warranty that the NX Tech products and services will meet your requirements or that use of the NX Tech services will be uninterrupted, timely, secure or error-free. Nor does NX Tech make any warranty as to the accuracy or reliability of any information obtained through NX Tech (including third party content), that any defects in the NX Tech products or services be corrected or that the NX Tech products or services will be compatible with any other specific hardware or service.

Further, NX Tech does not warrant that NX Tech products or services or NX Tech servers that provide you with data and content are free of viruses or other harmful components.

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NX Tech does not undertake any risk that you or property, or the person or property of others, may be subject to injury or loss if such an event occurs. The allocation of such risk remains with you, not NX Tech.

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Because some jurisdictions do not permit the exclusion of implied warranties, the last sentence of this section may not apply to you.

NX Tech hereby further expressly disclaims all liability for any claims for service failures that are due to normal product wear, product misuse, abuse, product modification, improper product selection or your non-compliance with all applicable federal, state or local laws.

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For a full understanding of your rights, you should consult the laws of your state, province, or country. For our Australian customers: Please note that this warranty is in addition to any statutory rights in Australia in relation to your goods which, pursuant to the Australian Consumer Law, cannot be excluded.

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Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Additionally, this provision is not intended to limit NX Tech's liability in the event of NX Tech's wilful or intentional misconduct.

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