

PROTOCOL®

AVIATOR™

REMOTE CONTROL HELICOPTER

INSTRUCTION MANUAL



THANK YOU.

Thank you for your purchase of Protocol's **Aviator Remote Control Helicopter**. You are about to experience the best of what remote control flight has to offer. We strongly recommend that you take the time to read this manual thoroughly. It contains many tips and instructions on how to get the most out of this aircraft and maintain it for a long life.

As with any aircraft, this is a precision flying machine. Treat it well and enjoy all the fun it has to offer, flight after flight.

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SAFETY WARNINGS

HAVE FUN, BUT SAFETY FIRST!

- Read and follow instructions on how to synchronize electronics before each flight.
- To prevent damage to people or property, always avoid contact with other objects while in flight.
- Inspect aircraft prior to each flight and do not fly if damaged.
- Never expose product or any of its electronic parts to moisture, water, or heat sources.
- To prevent overheating, allow battery a cool-down period before recharging.
- To prolong engine life, allow a cool-down period between flights.
- Use only the charger and/or charging cable that is supplied with this item.
- Do not strike, cut, or pierce the internal battery or subject it to hard impacts.
- Do not mix old and new batteries or mix different types of batteries.
- Never attempt to modify function of vehicle or controller or attempt repairs using parts other than those supplied by Protocol. Spare parts are available at www.ProtocolNY.com

**THIS DEVICE USES COMPONENTS THAT OPERATE AT HIGH SPEEDS.
AS WITH ANY SUCH DEVICE, USE CAUTION TO OPERATE SAFELY.**

**FAILURE TO FOLLOW ANY OF THESE GUIDELINES MAY RESULT IN BODILY
INJURY OR DAMAGE TO PERSONAL OR PUBLIC PROPERTY.**

PARTS



HELICOPTER

1. Canopy
2. Main Rotor Blade
3. Stabilizer
4. Connecting Shaft
5. Landing Gear
6. Tail Blade
7. Charging Socket
8. Power Switch

PARTS



REMOTE

1. Power Switch
2. Forward/Backward
3. Throttle
4. Turn Left/Right
5. Left Trimmer
6. Right Trimmer
7. Speed Selector
8. Charger Wire

SPARE PARTS INCLUDED

- Replacement Blades
- Screwdriver

REMOTE BATTERY INSTALLATION



Unscrew and remove battery cover from controller. Insert 4 x 'AA' batteries according to indicated polarities. Replace and screw back in battery cover.

1. Install batteries carefully.
2. Do not mix old and new batteries.
3. Do not mix different types of batteries.

CHARGING THE HELICOPTER BATTERY

1. Turn the transmitter on.
2. The cover to the charging wire is located on the back of the remote on the lower left side.
3. Connect the USB charging cable located inside of the remote to the battery to the charging slot on the helicopter.
4. The transmitter light will change to red to indicate the helicopter is charging and will turn back to blue once charged.

Charging time: approximately 60 minutes --- Flying time: approximately 6 minutes

- * Low Battery Signal:
The lights on the helicopter will begin to flash in flight to indicate low battery.



DO NOT CHARGE OVERNIGHT OR BEYOND THE CHARGING TIME STATED.
DO NOT LEAVE HELICOPTER UNATTENDED WHILE CHARGING.

*Battery: Li-Po, 3.7V, 100mAh

CAUTION WHEN CHARGING

1. When charging, place product on a dry, well-ventilated surface and keep away from heat sources.
2. Always use adult supervision while charging.
3. In order to increase battery longevity, avoid repeat charging and excessive discharging.
4. As battery temperature is high immediately after flight, charge after cooling down for higher efficiency.
5. Do not strike or subject battery to hard impacts or sharp surfaces.
6. Do not use any other charger than that which is supplied with this item.
7. Do not use or leave battery near a heat source such as fire or space heater; exposure to heat may result in reduced performance or in some cases dangerous conditions.
8. If battery is left in charging state for an extended period of time after being fully charged, the battery may automatically discharge.
9. Never leave the battery unattended during charging.
10. Do not disassemble battery.
11. Do not submerge battery in water.

START-UP PROCEDURE

*This helicopter is meant to be flown indoors. Do not operate under direct sun or strong lighting as it will affect the signal between the remote and helicopter.

Before flying, the helicopter and remote must be turned on in sequence and synchronized.

1. Turn on the helicopter and place it on an even surface with the nose facing away from you.
2. Make sure the remote is off. Set the throttle to minimum.
3. Turn the remote on. The power indicator will flash while it is picking up the helicopter's signal. The indicator will go steady once it has picked up the signal.
4. Push the throttle up and then down to sync.
5. The helicopter is now in stand-by mode and ready to fly.



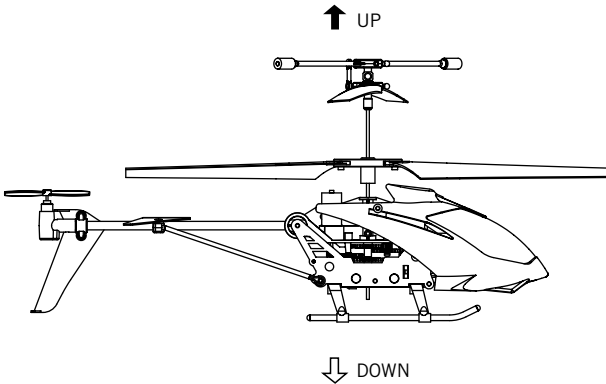
NOTE:

If after 30 seconds, the remote has not recognized the helicopter, turn off the controller and repeat Start-Up procedure.

OPERATION: FLYING THE HELICOPTER

TAKE-OFF AND HOVERING:

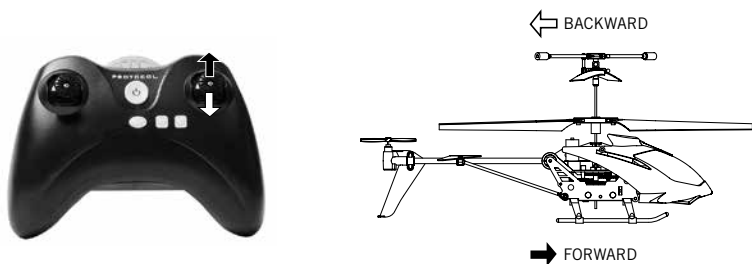
1. Slowly increase the throttle.
2. Do not look at the transmitter but focus on the helicopter.
3. As soon as the helicopter leaves the ground, reduce the throttle slightly.
4. Gently push the throttle up if the helicopter flies too low.
5. Gently pull the throttle down if the helicopter flies too high.



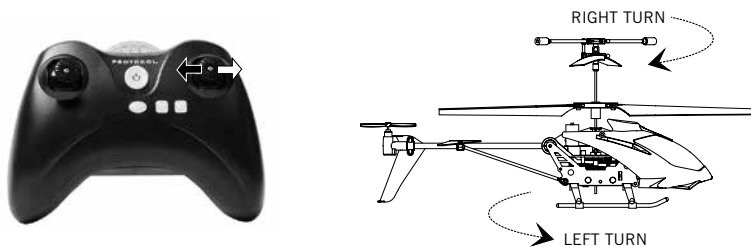
OPERATION: FLYING THE HELICOPTER

FIRST TIME FLYERS!!! TAKE YOUR TIME! GO SLOW!

Practice hovering until you are comfortable with flight before attempting any other maneuvers. If you start to lose control, don't panic. Just pull the throttle down until the helicopter lands.



Push the direction lever up or down,
the helicopter flies forward or backward.



Pull the direction lever to the left or right,
the helicopter turns to the left or right.

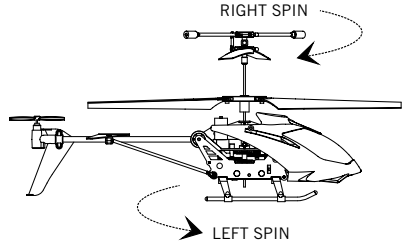
SPEED MODES

The Aviator features two speed modes. Choose the speed based on flight experience and level of comfort. At high speed the helicopter will pitch more than at low speed. Aviator is quite fast at its high speed and requires more piloting skills to fly competently. For safety take time to develop advanced skills by practicing at low speed first. The helicopter is preset to low speed. Press the Speed button to change the speed. The light on the remote will blink once for low speed and twice for high speed.



SPEED BUTTON

TRIM ADJUSTMENT



When the helicopter rotates to the left or right unintentionally, you can correct it by pressing the opposite direction trim button repeatedly until it evens out.

*NOTE: Trim adjustments are designed to counter drifts not caused by wind.

FLYING MULTIPLE HELICOPTERS

If flying more than one helicopter simultaneously, make sure that the transmitters and helicopters are paired to ensure that they detect different frequencies. The remote is preset to Band A.

- Pilot A turns on their helicopter and remote and syncs.
- Next, Pilot B does the same. Then, Pilot B presses the band selector for two seconds. The indicator light will flash twice for Band B.
- Both helicopters are ready to fly.

*To switch from B to A, just press the band selector again for 2 seconds and the indicator will flash once.

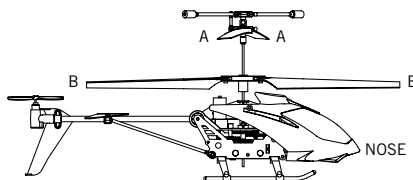
TROUBLESHOOTING

*Allow 15 minutes to pass between full flights as this will give the motors a chance to cool down. Failure to do so could wear out and shorten the life of the motors.

SYMPTOM	POSSIBLE CAUSE	POTENTIAL SOLUTION
Aviator does not respond	<ol style="list-style-type: none"> 1. Communication between controller and aircraft was not synchronized during set up 2. Battery power depleted on aircraft, controller or both. 	<ol style="list-style-type: none"> 1. To synchronize, turn on aircraft first, place it on level ground, and then turn on controller. 2. Charge aircraft and/or replace batteries in controller.
Response to control inputs intermittent or erratic	<ol style="list-style-type: none"> 1. Controller battery power nearly depleted. 	<ol style="list-style-type: none"> 1. Replace batteries in controller.
Aviator will not hover or strafe correctly	<ol style="list-style-type: none"> 1. The aircraft was not on level ground during synchronization. 2. Trim settings are incorrect. 	<ol style="list-style-type: none"> 1. Re-synchronize aircraft and controller. 2. Re-trim flight controls.

HOW TO CHANGE THE BLADES

- All helicopters have two rotors that spin clockwise and two rotors that spin counter-clockwise.
- Make sure to place the blades on the correct axis or they will not spin correctly and the helicopter will not lift.
- Each blade is marked with A or B.
- Make sure to follow the graphic below to see where to place the blades.



REPLACEMENT PARTS

Thank you for your purchase of Protocol's **Aviator Remote Control Helicopter**. We know that accidents can sometimes happen and that is why we offer spare parts kits on our website: **ProtocolNY.com**.

LIMITED WARRANTY

At Protocol, we're dedicated to bringing you innovative and well-designed products that make living fun and easy. We stand behind all of our products and warrant this to be free from defects in workmanship and materials for 30 days from the date of purchase. The warranty does not cover transportation damage, misuse, accident, or similar events. Specific legal rights pertaining to this warranty may vary by state.

For service claims or questions please consult our website **www.ProtocolNY.com**.

