# PR&PEL

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# AIR COMBAT

2.4Ghz Motion Controlled Battling Helicopter



# **USER MANUAL**

WARNING: Never leave product charging unattended for extended periods of time. Always disconnect helicopter from charger immediately after the helicopter is fully charged. Please refer to enclosed safety instructions.

#### THIS PACKAGE CONTAINS:





Controller



USB charging cord



Spare Parts



Instruction Manual

## WARNING! AVERTISSEMENT: ¡ADVERTENCIA!

CHOKING HAZARD - Small parts. Not suitable for children under 3 years.

CHOKING HAZARD - Pièces de petite, taille
N'est pas conçu pour des enfants de moins

PELIGRO DE ASFIXIA - Partes pequeñas. No apto para niños menores de 3 años.

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Colors and styles may slightly vary.

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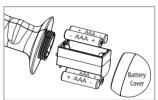
Thank you for purchasing the AIR COMBAT™ 2.4Ghz Motion Controlled Battling Helicopter from Propel RC. Please read this instruction booklet carefully as it contains valuable information on how to properly fly and care for your helicopter.

#### **FEATURES**

- Advanced motion control technology gives you more real-flight maneuvers and battle action than ever before!
- Using advanced infrared battling technology Air Combat copters "dog-fight" in Mid-air.
- With each successful "hit" side-lights illuminate and the copter performs a spin.
- After three strikes, the defeated players copter automatically spirals to the ground-game over! Reset your copter and get back into the battle!
- Realistic lights, sound and vibration feedback keeps players engaged
- On board 2.4Ghz digital spread spectrum allows up to 8 Players to battle simultaneously.

### REMOTE CONTROL BATTERY INSTALLATION

- 1. Twist off the battery cover from the remote control.
- 2. Install 4 "AAA" alkaline batteries as shown in the diagram.
- 3. Replace the battery cover.

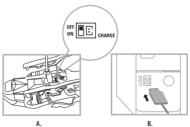


Battery Compartment (4 "AAA" batteries)

#### CHARGING THE HELICOPTER

- 1. Make sure the helicopter's power switch is in the "OFF" position and plug the USB charging cord into the charging socket of the heliconter(see diagram A ). IMPORTANT: Do not force the charging head into heliconter charging socket. If it doesn't go in easily try turning the head in the opposite direction.
- 2. Connect the helicopter charging cord to your computer's USB port (see diagram B). IMPORTANT: Never use this charging socket with any other USB port then your personal computer or a Propel Brand USB wall charger. You may purchase a Propel USB wall charger at www.propelrc.com
- 3. A SOLID red LED Light will appear on the USB jack that is plugged into your computers USB socket. When charging is complete the red LED light will disappear and you are ready to play. IMPORTANT: If the red LED light is flashing rapidly this means that the charging socket connection is not inserted properly or the Helicopter "OFF/ON" switch is in the ON position and needs to be turned off for charging.
- 4. The charging time will vary depending on the amount of charge already stored in your battery. The average charging time for the battery is approximately 30-40 minutes.

IMPORTANT: ALWAYS REMEMBER TO UNPLUG YOUR CHARGING CORD WHEN NOT IN USE!





is charging

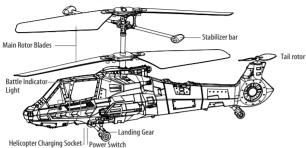
A solid Red LED light will appear on USB when helicopter

Charging socket is located on the underside of the helicopter next to the power switch. Charging cord connects as indicated. Indicator light on charger stays on until charging is complete.

IMPORTANT: ALWAYS DISCONNECT CHARGER CORD AFTER CHARGING. NEVER LEAVE CHARGER CONNECTED TO HELICOPTER OVERNIGHT OR FOR EXTENDED PERIODS OF TIME.

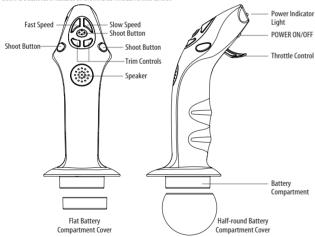
### HELICOPTER DIAGRAM

Below is a basic list of features and parts on the helicopter.



#### REMOTE CONTROL DIAGRAM

Below is a basic list of features on the infrared wireless remote control.



## PREPARING FOR FLIGHT

- Verify that there are 4 "AAA" fresh batteries inside the remote control unit and the helicopter has been fully charged.
- Make sure your helicopter is turned on and properly synced to your controller. (See "SYNC YOUR HELICOPTER" below)
- Make sure to be in a large room with an open radius of at least 25 feet. Close all windows and doors, turn off fans and
  close air ducts or any other openings that may cause drafts in the room.
- Make sure the room has no obstacles and the highest ceiling possible.

IMPORTANT: YOUR AIR COMBAT HELICOPTER IS DESIGNED FOR INDOOR FLYING. NEVER FLY YOUR FLY YOUR HELICOPTER OUTDOORS.

#### SYNCING YOUR HELICOPTER

Your Air Combat<sup>TM</sup> utilizes an automatic 2.4G channel selection system that allows up to 8 people to fly side by side in the same wireless range.

#### FOR ONE PERSON PLAY:

- 1. Before starting, make sure that the power on both your controller and helicopter are in the OFF position.

  Make sure that there are no other 2.4G devices in the area as well.
- 2. Turn ON the helicopter and set it down on a flat surface. The 3 red LED indicators on each side of the body will slowly BLINK. This means your helicopter is searching for a controller to pair with
- 3. Next, IMMEDIATELY Turn ON your controller and wait a moment. The 3 red LED indicators on each side of the body should rapidly flash and then settle into a "double-beat" sequence. When this happens you have properly synced your helicopter and you are ready to fly. Note: If you do not achieve a "double-beat" LED sequence then you are not swored and you must repeat stees 1-3 again.
- 4. SAFETY TRIGGER: After syncing, The Air Combat helicopter creates an auto safety trigger and will not fly until the "second pull" of the throttle. Simply pull the throttle down ONE TIME and release. You will see all the LED's Become solid and stop flashing. This means that you have released the safety trigger and are ready to fly. Note the safety trigger mechanism is to protect the operator against an unprepared or accidental flight.

#### FOR MULTI PERSON PLAY:

- 5. Before starting, make sure that the power on all Helicopters and Controllers are in the OFF position. Make sure that there are no other 2.4G devices in the area as well.
- 6. Each person will have to sync their helicopter individually at a different time to avoid interference. Follow steps 1 to 3 above making sure to keep away from other people while also making sure that no one else is syncing at the same time.
- 7. IMPORTANT: After syncing a players helicopter, Both the helicopter and the controller should be left ON until all players have individually synced their helicopters.
- 8. Should there be a mistake or interference, all players must turn off their controllers and helicopters and start the process all over again.

IMPORTANT: Remember each player must sync there helicopter one at a time and leave it on, while un-synced helicopters are powered off.

Before Syncing, your Throttle should always be set to ZERO (All the way down). However, to prevent damage and injury, your helicopter has been fitted with a Safety Mechanism. See "Safety Trigger above for further information."

#### FLYING TIPS

- Operate the helicopter in a wide, indoor space. You should allow at least a 25-foot radius. The helicopter is designed for INDOOR LISE ONLY
- · Parental guidance or adult supervision is suggested at all times.
- If you are flying the helicopter with others, make sure all spectators are behind you.
- For best performance, it is recommended that you operate the helicopter in zero wind conditions. Close all open doors or windows, and turn off any nearby fans. Wind can greatly affect the performance of the helicopter.

#### UNDERSTANDING HELICOPTER TRIM ADJUSTMENTS

If your helicopter's nose rotates to the left or right uncontrollably, you may need to utilize the TRIM buttons. If your helicopter over-rotates CLOCKWISE (to the right), push and release the LEFT trim button repeatedly until the turning stops and proper flight is maintained. If your helicopter over-rotates COUNTER-CLOCKWISE (to the left), push and release the RIGHT trim button in the same manner until the problem is resolved. From time to time you may have to adjust the left and right trim to ensure the helicopter will fly straight and respond accurately to control commands.







Trim Controls

L R Push left trim.

L R Push right trim

### FLIGHT AND CONTROLS

Below is a list of basic flight functions for your Air Combat<sup>TM</sup> wireless remote-control helicopter. While you're learning to fly your helicopter, it is best to start with a large room until you get used to the basic controls.



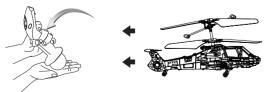
The controller comes with two different interchangeable battery compartment covers (please see remote control diagram). The half-round cover is for additional stability using a second hand, table or other flat surface as a resting base. That flat cap battery compartment is for one-handed free form flight.



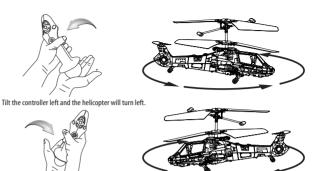
Pull the trigger back or release to increase or decrease the speed of the main rotor and the helicopter will rise up or descend accordingly.



Tilt the controller down and forward and the helicopter will move forward.



Tilt the controller up and back and the helicopter will move backward.



Tilt the controller right and the helicopter will turn right.

SPEED CONTROLS: Your air combat helicopter has the capability to operate in a beginner (slower) and advanced (faster) Speed mode. Simply select your speed mode while in flight by depressing the "SLOW" or "FAST" speed mode buttons (See REMOTE CONTROL Diagram).

TIP: You test to see whether you are in fast or slow speed mode by first hovering your helicopter and then turning right and left.

# INTERACTIVE BATTLE MODES

Get ready for aerial combat missions with your friends—or "enemies" \_\_(Note Requires additional Air Combat helicopter.)

PREPARATION FOR MISSION:

The Landson Tolking Solvi.

1. Make sure all battling helicopters are fully charged, individually synced and ready to fly (refer to "sync your helicopter" on page 4).

READY, AIM, FIRE!

- 1. While your helicopter's in flight, aim the front of your helicopter towards the cockpit of your opponent's helicopter and press one of the FIRE buttons on your controller.
- 2. If you score a hit, your enemy's controller will vibrate, the helicopter will lose one of his tail lights and will quickly turn 180 degrees to defend it's cockpit from the next strike.
- THREE STRIKES YOUR OUT!
- 3. On the third direct hit, your opponent's helicopter tail lights will simultaneously flash red and control of their copter will be lost. The copter will gradually descend safely to the ground. Mission accomplished!
- 4. After 10 seconds the downed helicopter will recover (reset) and will be ready for the next dogfight.

#### HELICOPTER WARNING AND SAFETY PRECAUTIONS

The helicopter blades revolve at high speeds and can cause damage to the user, spectators, and animals. Stand away from the helicopter to reduce the risk of getting into the flight path. Warn spectators that you will be flying your helicopter so that they are aware of its position. Before flight, inspect the rotor blades to make certain that the blades are securely fastened to the helicopter.

#### WARNINGS

- · Choking/Cutting Hazard. Small Parts/Sharp Rotor Blades.
- Keep hands, hair, and loose clothing away from the propeller when the power switch is turned to the ON position.

6

- Turn off the transmitter and helicopter power switches when not in use.
- The charging cable is for charging the helicopter's Li-poly battery. Do not use it to charge any other battery.
- New alkaline batteries are recommended for maximum performance.
- Parental supervision recommended when flying the helicopter.

#### PART REPLACEMENT INSTRUCTIONS

#### CONTENTS:

(1) 1 upper propeller blade (3) 4 connecting rods x 4 (2) 1 bottom propeller blade (4) 4 screws x 4

#### Air Combat PROPELLER SYSTEM

Your Air Combat propeller system is a precision instrument that may need repair or replacement from time to time for optimal flight function. Crash landing from high-speed aerial flights may cause damage to your Air Combat propeller or propeller connecting rods.

#### TROUBLESHOOTING:

If your Air Combat loses its ability to fly correctly, please inspect the propeller system carefully for the following two common issues:

1. Replacing Connecting Rod: The connecting rod is a small "handcuff" style device that stabilizes the "upper" propellers. There is one connecting rod on the upper propeller. Pleasesee Diagram 1.

If a connecting rod is broken or missing simply replace it by "peeling" off the existing broken unit and replacing it with a new one. You may have to use slight pressure when reattaching both ends of the new connecting rod. Make sure that the new connecting rod is secured and locked in place. See Diagram 2. For changing connecting rod, make sure there is no damage to the actual blade or arm that holds the connecting rod in place. If there is you must replace the entire blade system.

2. Replacing Upper and Bottom Propeller: The propeller is subject to damage as you learn to properly fly and control your Air Combat. If after a crash your helicopter has loss of control or flies erratically you should carefully inspect your entire propeller system for any sign of damage. Most common are: cracked or chipped blade, broken "connecting rod". frozen balance bar (this is when the balancing bar and blade are jammed and can not move freely up and down). To replace the propeller blades follow diagrams 3 through 12.

#### REPLACING CONNECTING RODS

#### Diagram 1



There is one propeller connecting rod on the upper propeller.



Broken connecting rod



Broken connecting rod

#### Diagram 2



Replacing connecting rod



Proper connection

#### REPLACING THE UPPER PROPELLER BLADE



Diagram

Using a screwdriver turn counter clockwise to remove the screw.



Diagram

Using the screwdriver turn clockwise to tighten the screw.



Please note the design of the upper blade.

Remove the broken blade and carefully replace with a new one.



Diagram

When you tighten the screw you should test the blade to make sure that it still has free movement. If the blade cannot move freely, slightly loosen the screw.

### REPLACING THE BOTTOM PROPELLER BLADE



Diagram

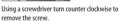




Diagram 10

12

Using the screwdriver turn clockwise to tighten the screw.



Please note the design of the bottom blade.



Diagram

Remove the broken blade and carefully replace with a new one.



Diagram 11

When you tighten the screw you should test the blade to make sure that it still has free movement. If the blade cannot move freely, slightly loosen the screw.

#### **BATTERY WARNINGS**

#### RECHARGEABLE BATTERY:

This helicopter uses an internal Li-Poly rechargeable battery and is not replaceable. If the battery can no longer be charged, dispose of the helicopter properly according to local disposal requirements.

#### CONTROLLER BATTERIES:

Remote control requires 6 "AA" batteries (not included). Please read the important battery safety warning below.

- Do not mix alkaline, standard (carbon-zinc) and rechargeable batteries (Nickel Metal Hydride).
- · Do not mix old and new batteries.
- Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are to be removed from the item before being charged (if removable).
- Rechargeable batteries are only to be charged under adult supervision.
- Exhausted batteries should be removed immediately and must be recycled or disposed of properly according to state or local government ordinances and regulations.
- The supply terminals are not to be short-circuited.
- Only batteries of the same or equivalent type as recommended are to be used.
- · Batteries are to be inserted with the correct polarity.
- Do not dispose batteries in a fire batteries may leak or explode.

#### CARE AND MAINTENANCE

- · Always remove the batteries from the remote control when it is not being used for an extended period of time.
- To clean, gently wipe the remote control and helicopter with a clean damp cloth.
- · Keep the toy away from direct heat or sunlight.
- · Do not submerge the toy into water. This can damage the unit beyond repair.
- Parental guidance recommended when installing or replacing the batteries.

#### FCC Part 15 B Notice

**CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** 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 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 interference that may cause undesired operation.