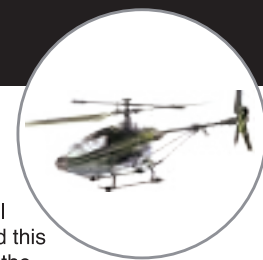


# The Pilot's Handbook Predator SB™ Helicopter

Pilot's Handbook for  
Predator SB™ with Gyro RC Helicopter

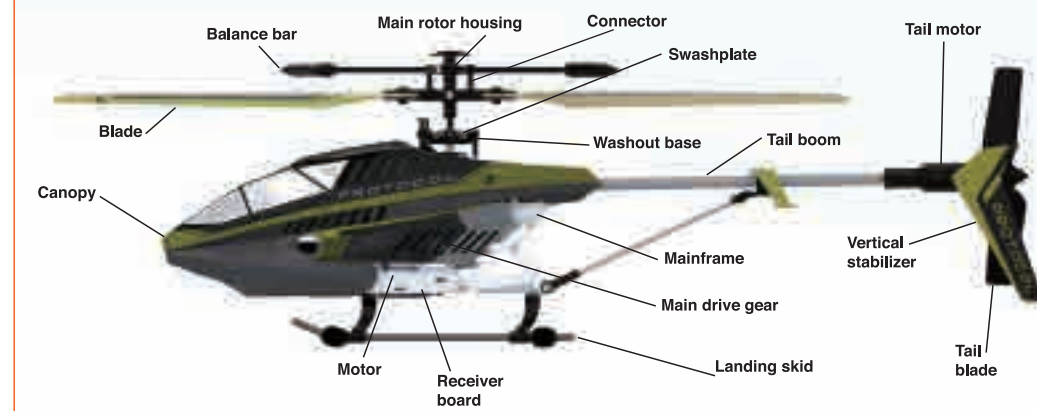


Thank you for your purchase of Protocol's **Predator SB™ with Gyro RC Helicopter**. You are about to experience the best of what remote control flight has to offer. We strongly recommend that you take the time to read this manual thoroughly. It contains many tips and instructions on how to get the most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

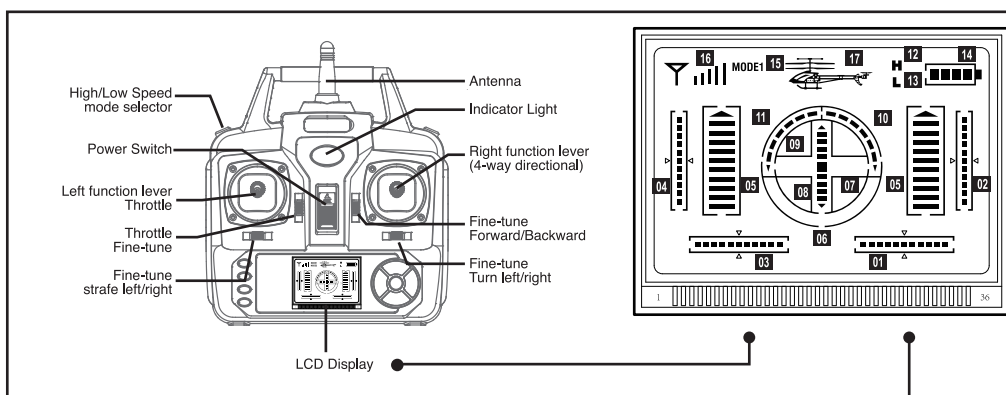
As with any aircraft, this is a precision flying machine. Treat it well and enjoy all the fun it has to offer, flight after flight.

Age  
**14+**

### Helicopter and Remote Control Parts:



### REMOTE CONTROL KEYPAD AND LCD MANUAL

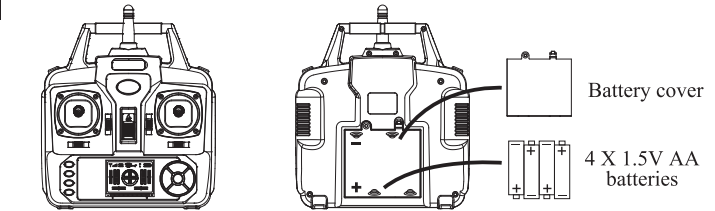


#### Remote Control Keypad and LCD Manual

01. Fine-tuning: Side-to-side Strafing [defaults to center on start-up]
02. Fine-tuning: Forward/Backward [defaults to center on start-up]
03. Fine-tuning: Turn Left/Right [defaults to center on start-up]
04. Fine-tuning: Throttle [defaults to center on start-up]
05. Throttle [defaults to zero on start-up]
06. Directional Display [defaults to center on start-up]
07. Lateral Movement to Left
08. Rearward Movement
09. Lateral movement to Right
10. Right rotational movement [defaults to zero on start-up]
11. Left rotational [defaults to zero on start-up]
12. High Speed Mode Active
13. Low Speed Mode Active
14. Controller Battery Level Indicator
15. Flight Mode 1 Active
16. Remote control signal strength
17. Indicates positive communication lock with the Predator SB

### BATTERY INSTALLATION AND CHARGING

#### Remote Control

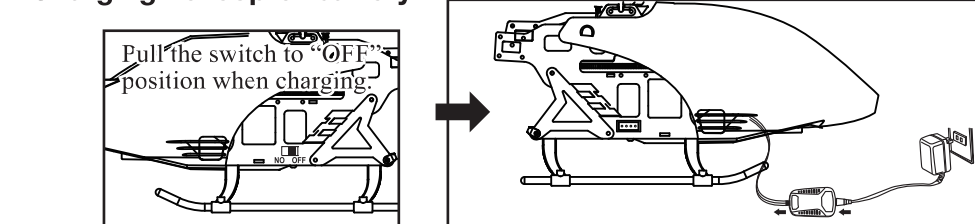


Unscrew and remove battery cover from R/C unit, insert 4 'AA' batteries, noting polarity indicators. Replace battery cover.



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

#### Charging helicopter battery



#### Integrated Charger

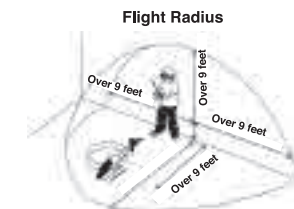
Turn off the helicopter and disconnect the power lead from helicopter chassis. Connect lead to charging cable. LED will illuminate, indicating active charging state. When charging has completed, the LED will extinguish; a fully-discharged battery will accept approximately 80 minutes of charging to regain full charge.

**80 minutes of charging will produce 6 minutes of flight**

The Predator SB is equipped with a Li-Poly battery; please remember the following precautions for safe use:  
Do not use or leave battery near a heat source such as a fire or space heater; exposure to heat may result in reduced performance or in some cases dangerous conditions.  
Do not strike or subject battery to hard or sharp surfaces.  
Do not immerse or submerge battery in water; store in a cool, dry location.  
Do not use any other charger than that which is supplied with this item.  
Do not disassemble battery.  
Never leave the battery unattended during charging.  
As battery temperature is high immediately after flight, charge after cooling down for higher efficiency.

### Preparing for Flight:

1. Do not fly in strong wind. Windy conditions will limit or completely interfere with flight control, resulting in your helicopter becoming damaged or lost.
2. Choose a flight area that is free of obstacles such as animals, people, electrical lines, trees, or other obstructions.



### Turning on the Helicopter:

1. Plug battery lead into helicopter chassis.
2. Turn on helicopter.
3. Place the helicopter onto the ground and stand at least 9 feet behind it.
4. Make sure the throttle on the remote control is at its lowest position.
5. Turn on the power switch to the remote control. The remote will start beep as it is syncing with the helicopter.

### Speed Control:

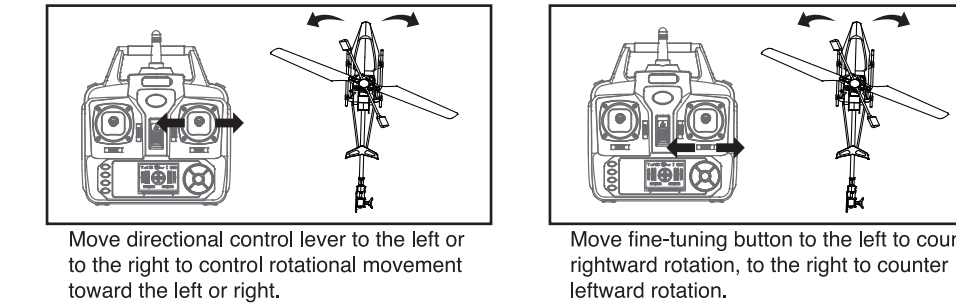
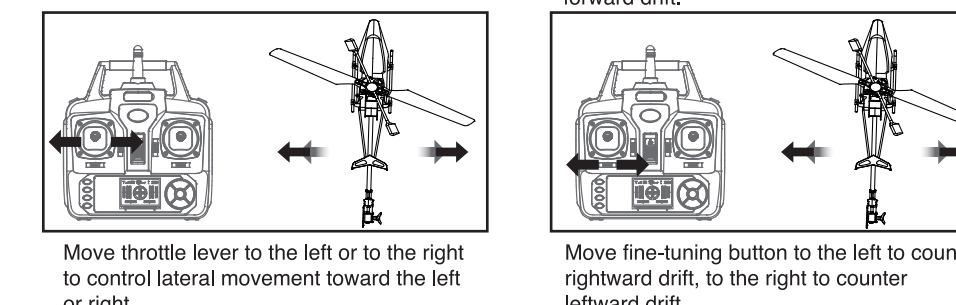
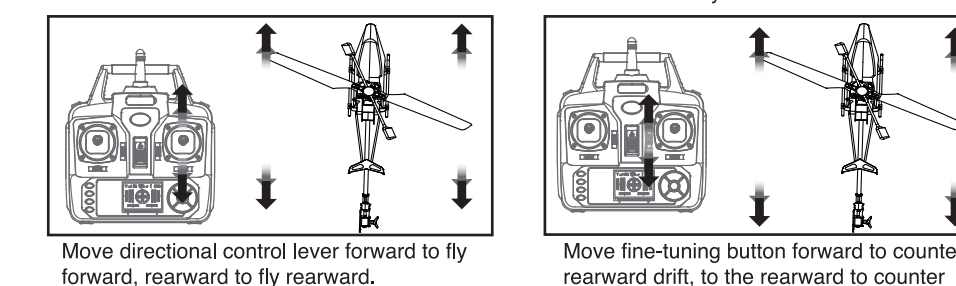
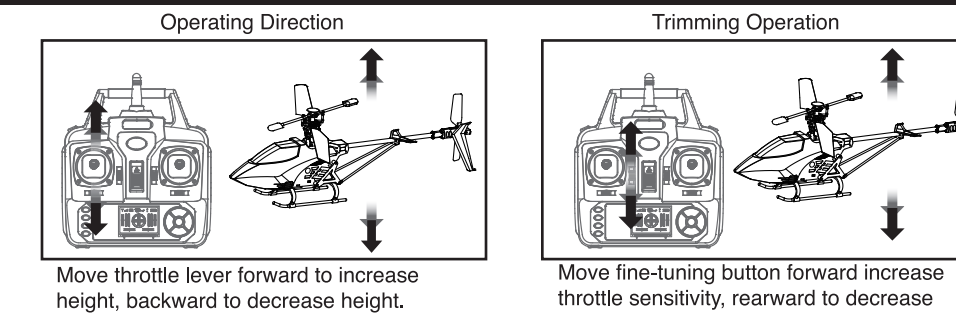
You can adjust the speed on the helicopter by pressing the High/Low speed button.

It is recommended to start with a slower speed when flying this helicopter for the first time.

Before flying, it is recommended that you become acclimated to the remote and helicopter. The best way to do this, is to push up on the throttle only enough so that the blades on the helicopter are turning but there is no lift off.

Practice the flight controls below and then the trim adjustments. Once you are comfortable with how the remote and helicopter work, you can then push the throttle up further to achieve flight.

### CONTROLLING THE PREDATOR SB



### TRIMMING OF THE RUDDER CONNECTING LEVER

If the Predator SB does not operate as expected after trimming the transmitter, the helicopter may be in need of trimming to the rudder connecting lever. Please adjust trim by rotating the trimmer in efforts to balance the helicopter's in-flight balance. Detail directions are as follows:

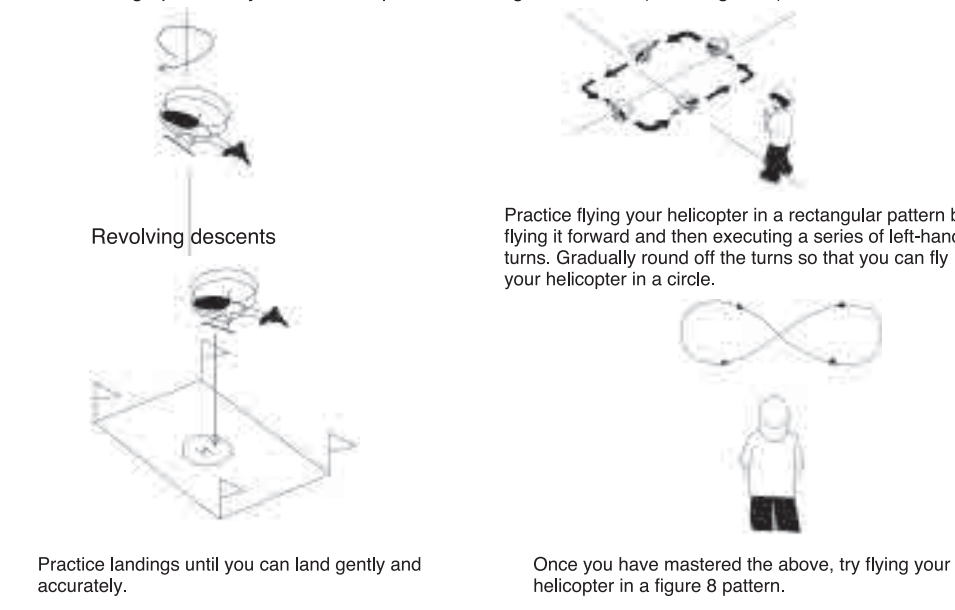
1. If the helicopter drifts forward while hovering, remove the left rudder connecting lever from the tilted plate and twist in a clockwise direction. One or two full rotations should suffice; if helicopter drifts backward while hovering, perform this operation in the counter-clockwise direction. The left rudder controls forward/backward motion.
2. If the helicopter drifts left while hovering, please remove the right rudder connecting lever from the tilted plate and twist it in a clockwise fashion. One or two full rotations should suffice; if helicopter drifts to the right while hovering, perform this operation in the counter-clockwise direction. The right rudder controls left/right motion.

#### Caution:

When trimming rudder connecting lever, we suggest trimming only one side at a time. Take care during this procedure as these parts are sensitive and somewhat fragile.

### Flying Practice:

With enough practice, you can attempt the following maneuvers (see diagrams):



Practice landings until you can land gently and accurately.

Once you have mastered the above, try flying your helicopter in a figure 8 pattern.

### Troubleshooting:

#### The remote control doesn't work:

1. Make sure the remote control's power switch is on.
2. Make sure the batteries in the remote control are inserted properly, according to polarity symbols (+) and (-) in the battery compartment.
3. Replace the batteries.

#### Unable to control the helicopter:

1. Make sure the helicopter's battery cable is inserted properly.
2. Make sure the remote control has synced with the helicopter.
3. Do not fly the helicopter in wind, which can interfere with control.

#### The helicopter will not ascend:

1. Make sure you are pulling up on the throttle stick.
2. Make sure the helicopter battery is fully charged.

#### The helicopter lands too fast/crashes:

1. Slowly pull down the throttle until the helicopter lands smoothly.
2. Make sure the helicopter battery is fully charged.

#### Caution:

1. Remote control range is reduced when the batteries are low.
2. When the helicopter's battery is low, it will not fly as high.
3. Do not fly the helicopter if the rotor is damaged or broken. Injury can result.
4. Landing the helicopter too fast or crash landing will result in a shorter lifespan for the helicopter.
5. Keep hands, fingers, eyes, hair, and loose clothing away from rotors and moving parts.

### Replacement Parts:

Thank you for your purchase of Protocol's **Predator SB™ with Gyro RC!** We know accidents can sometimes happen which is why we offer spare parts kits on our website: [ProtocolNY.com](http://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, crashes, accident, or similar events. Specific legal rights pertaining to this warranty may vary by state.

For service claims or questions please consult our website [ProtocolNY.com](http://ProtocolNY.com).