Instruction Manual for
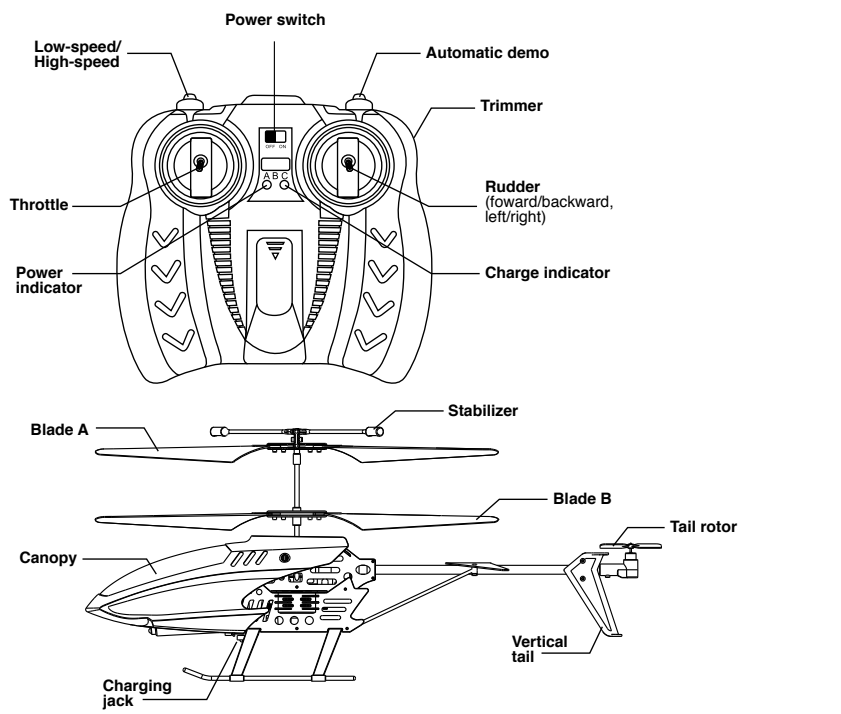# Spîr with Gyro RC Helicopter

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Thank you for your purchase of Protocol's **Spîr 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.
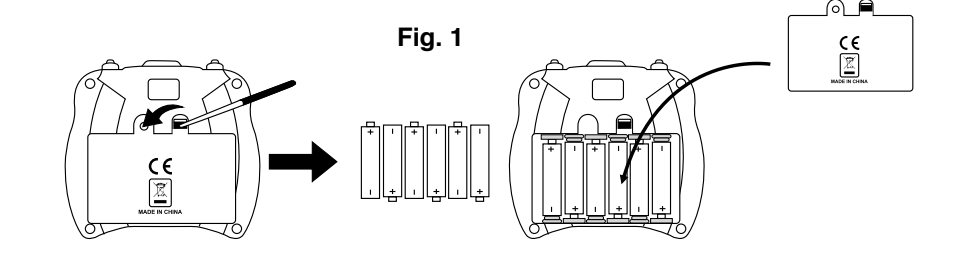
Helicopter and Remote Control Parts:

Power switch
Low-speed/High-speed
Automatic demo
Trimmer
Throttle
Rudder (foward/backward, left/right)
Power indicator
Charge indicator

Blade A
Stabilizer
Blade B
Tail rotor
Canopy
Vertical tail
Charging jack

Assembling the Remote Control:

1. Open battery case cover on the back using a small Phillips screwdriver.
2. Install the batteries (6 AA, not included) according to polarity symbols (+) and (-) in battery compartment (Fig. 1).
3. Replace the battery cover.
4. When the power light remains on after the remote is turned on, the batteries are working. When the power light begins blinking, the batteries are dying and need to be replaced.
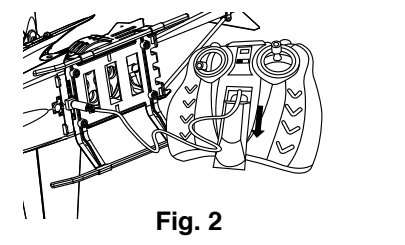
Battery Notes: Do not mix old and new batteries. Do not mix different types of batteries. Only use 'AA' alkaline batteries for this product. Remove batteries if this product is not going to be used for a long time. Always remove exhausted batteries from the product and dispose of safely.

Fig. 1

Charging the Helicopter:

A. Charging through the Transmitter
a. Turn the transmitter on.
b. The cover to the charging wire is located on the front of the transmitter in the middle. Pull out the charging wire and plug into the slot on the helicopter as indicated in Fig. 2.
c. The charge light will turn on to indicate the helicopter is charging. The helicopter will be fully charged after approximately 40 minutes for approximately 6 minutes flying time.
d. The charge light will turn off once fully charged.

B. Charging through USB (if included with model)
a. Place the provided USB wire into a USB port on a computer.
b. Place the other end into the helicopter.
c. The light in the USB wire will go on while charging. Charging time is approximately 40 minutes for approximately 6 minutes flying time.
d. The light in the USB wire go dark once charging is complete.

*Recharge the battery when the helicopter cannot lift any higher than ½ foot off the ground.
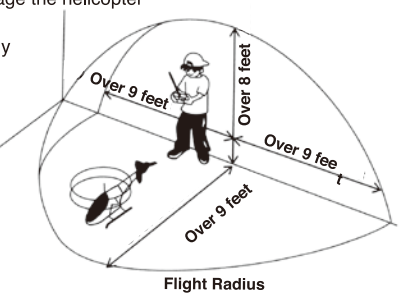
Fig. 2

Flying Your Helicopter

Each transmitter can operate on 1 of 3 frequencies. The band selector on the front of the transmitter is the means by which you select the frequency. The helicopter will detect the frequency that the controller is set to. For example, if the controller is set to band A then the helicopter will automatically detect that frequency.

Preparing for Flight:

1. Do not fly in temperatures below 50°F/10°C. Doing so may damage the helicopter and/or adversely affect your ability to control it.
2. Do not fly in strong wind. Windy conditions will limit or completely interfere with flight control, resulting in your helicopter becoming damaged or lost.
3. Choose a flight area that is free of obstacles such as animals, people, electrical lines, trees, or other obstructions.

Over 9 feet
Over 9 feet
Over 9 feet
Flight Radius

Turning On The Helicopter:

*Turning on the Helicopter
- Place the helicopter on the ground with the tail pointing towards you and the nose facing away from you.
- Make sure the transmitter is OFF. Set the throttle to MINIMUM.
- Turn the transmitter to ON. Then set the ON/OFF switch on the helicopter to ON.
- The helicopter picks up the transmitter's signal. This process can take up to 8 seconds.

Hi-Lo Speed Modes:

This helicopter has high and low speed modes. High speed is great for seasoned pilots. Low speed is recommended for beginners. Just press the button on the remote control to switch between low and high speed.

Auto Demo:

Push the throttle to the middle position. Press the auto demo button and the helicopter will turn on its own. Press the auto demo button again to leave this mode.

Controlling Your Helicopter:

Ascend	Push up on the throttle stick (see diagram) to raise the helicopter.		
Descend	Pull down on the throttle stick (see diagram) to lower the helicopter.		
Steering	Move the rudder stick (see diagram) left to turn the helicopter left. Move the rudder stick (see diagram) right to turn the helicopter right.		
Forward	Push up the steering rudder (see diagram) and the helicopter's nose tilts down and it flies forward.		
Backward	Push down on the steering rudder (see diagram) and the helicopter's nose tilts up and it flies backward.		

*Do not crash the helicopter from a high altitude. Damage can occur to the helicopter due to its size.

Fine Tuning Your Helicopter's Flight:

If your helicopter rotates in flight even when you are not using the remote control to make it do so, then you can adjust the trim dial to correct it.
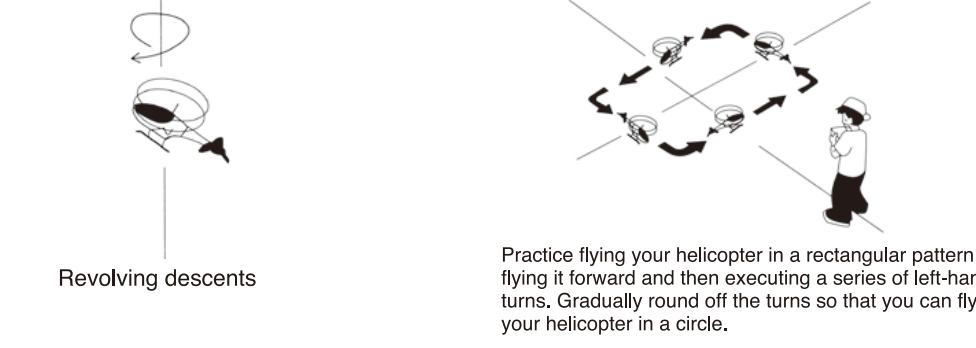
If your helicopter is rotating left, turn the trim dial to the right (see diagram). Continue to adjust this dial until the helicopter line flies straight.		Right turn
If your helicopter is rotating right, turn the trim dial to the left (see diagram). Continue to adjust this dial until the helicopter line flies straight.		Left turn

Note: If the helicopter is less than 1 foot from the ground, the vortex from the spinning blades can create flying issues. Please make sure to fly the helicopter above this height.
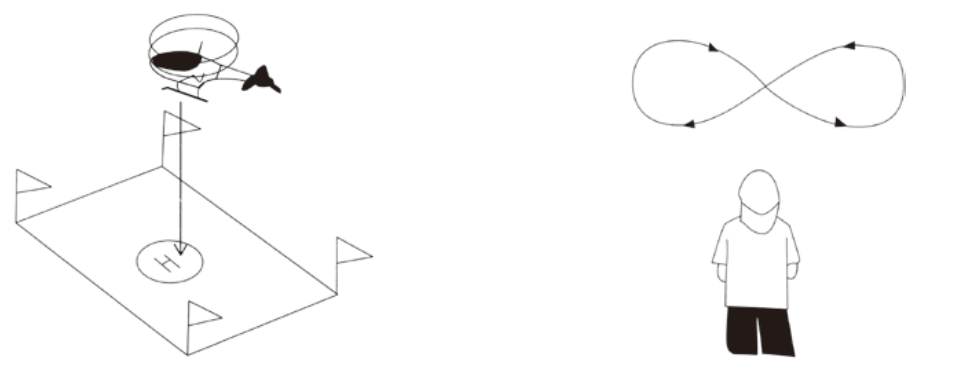
Note: The tail blade may not always spin as you are flying. Please note that this is normal as long as you are able to control the helicopter

Flying Practic

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

Revolving descents

Practice flying your helicopter in a rectangular pattern by flying it forward and then executing a series of left-hand turns. Gradually round off the turns so that you can fly your helicopter in a circle.

Practice landings until you can land gently and accurately.

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

Crashing:

If the helicopter crashes, the rotors will automatically shut off in order to protect and extend the life of the motor. The pilot will have to complete the start-up process again to continue using the helicopter.

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 power switch is on.
2. 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 **Spîr with Gyro RC Helicopter**! We know that accidents can someimes happen which is why we offer a spare parts kit available on our website **ProtocolNY.com.**