



Sparcl™ is distributed exclusively by Horizon Hobby Inc. Champaign, IL 61822 ©2007

> www.sparctoys.com www.horizonhobby.com

OWNER'S MANUAL

Keep these instructions for future reference as they contain important information.

Precautions

SAFETY FIRST

- Charge the batteries following the battery and charger manufacturers' instructions.
- Charge the batteries with the included charger before your first flight.
- Do not charge the batteries with a charger other than the one that is included.
- Do not charge batteries, other than the built-in Li-Po battery, with the included charger or use the charger as the power source for other equipment
- Do not charge batteries within the reach of young children.
- Do not drop or smash the batteries or the charger during charging.
- Do not recharge a Li-Po battery that is already fully charged, otherwise the battery may be damaged.
 Li-Po batteries have a low natural discharge rate and do not require recharging in the first 1 or 2 hours after a charge.
- When charging is complete, unplug the charger from the wall outlet.
- After use, be sure to turn the switch off. Failure to do so may adversely affect the batteries, resulting in permanent damage.
- Do not short-circuit battery terminals, or the battery may swell and get hot, leading to fire.
- Do not wet batteries, heat, disassemble or modify them. Do not dispose of batteries in fire.
- Do not use, store or charge batteries in a place near a heater, or in high temperature or humid conditions.

Caution

To avoid battery leakage of the 9-volt transmitter battery:

- Make sure the battery is inserted with correct polarity and follows the toy and battery manufacturers' instructions.
- After use, remove the battery from the transmitter for storage.
- Do not attempt to short-circuit, disassemble or heat batteries. Do not dispose of batteries in fire or wet them.
- If battery fluid contacts your eyes, skin or clothes, immediately wash them with water and consult a doctor.

PRECAUTION BEFORE FLIGHT

Depending on flight conditions or due to improper control, flying a helicopter can be hazardous, resulting in unforeseen accidents such as bodily injury and property damage. The helicopter operator shall be held responsible for such an accident.

Warnings During Flying

- To avoid hazards from improper use, this helicopter is not intended for children under 14 years old. Adult supervision is required during the use of this helicopter.
- Do not touch charging terminals (i.e., the metal part) on the helicopter body or the charger.
- Make sure you have plenty of open space in all directions (at least a 3 meter radius from your location). Fly the helicopter in a safe area away from people, pets, etc.
- Check if a nearby transmitter is producing interference or signals with the same frequency. In such a case, move to another place or wait until the other RC user has finished operating his/her vehicle.
- Do not point the transmitter antenna toward the head of a person or animal or an unforeseen accident may occur. Also, do not bend the antenna.
- Do not fly the helicopter toward a person or animal or an injury may occur.
- Do not bend or pull the components with a strong force.
- Never attempt to disassemble or modify the helicopter.
- Do not bring your face or hands near the rotor. For safety, you are recommended to wear goggles.
- Always supervise the helicopter in flight.
- Do not operate the rotor while it is locked.
- Do not drop or impact.
- Do not use the helicopter if it is irreparably damaged or distorted.
- After use, store the helicopter in a place out of the reach of children 3 years old or younger.
- Do not store the helicopter in a place near a heater or where temperatures rise, such as inside a hot car when all of the windows are rolled up.

2

Battery Disposal Instructions

This product contains a lithium polymer battery and must be disposed of properly. Contact your local area office of solid waste management or other appropriate local agency for information. Do not attempt to disassemble the battery before disposal.











This kit includes:

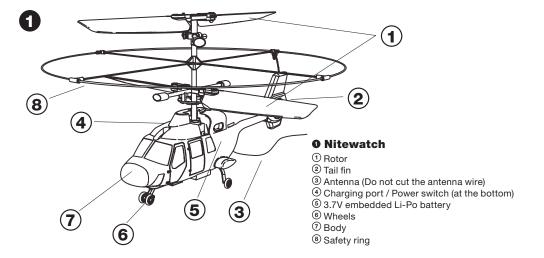
THIS KILLING

- A. Nitewatch
- B. Transmitter
- C. Charger
- D. Transmitter antenna

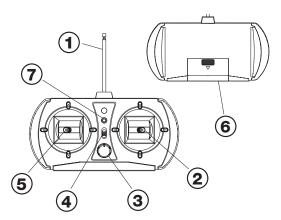
The product shown in the figure may differ slightly from the actual product

I. CONTENTS & FEATURES









9 Transmitter

- 1 Antenna
- 2 Elevator stick
- 3 Adjustment knob
- 4 Switch
- ⑤ Rudder stick (left/right) / Throttle stick (up/down)
- Battery cover
- ③ Search light off/on

FCC STATEMENT

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. Changesormodificationstothisunitnotexpresslyapproved bythepartyresponsibleforcompliancecouldvoidtheuser's authority to operate the equipment.

3

II. INSTALLATION

0 Transmitter Antenna Installation / Removal

- ① Antenna Installation
- a. Turn the antenna clockwise to screw it into the transmitter body.
- b. Securely screw it in place; a malfunction may result from a loose antenna connection.
- 2 Antenna Removal
- a. Turn the antenna counterclockwise to remove it.
- b. When housing the antenna, retract it from the root rib to avoid bending the antenna rod.

9 Transmitter Battery Installation

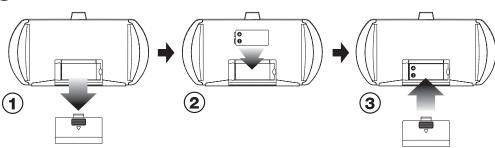
Use one 9-volt battery for the

transmitter (not included).

- ① Slide open the BATTERY DOOR in the direction shown in the figure.
- ② Insert a 9V BATTERY with the polarity (+/-) as shown below.
- 3 Replace BATTERY DOOR.

When the capacity of the 9V battery becomes low, the LED lamp changes from steady to blinking. You need to replace the 9V battery, or a malfunction may occur due to shortened operating



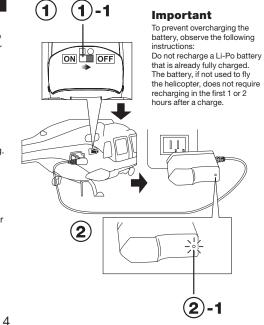


III. BUILT-IN BATTERY CHARGING

A rechargeable battery is built into the helicopter body. Be sure to charge the battery before you use it. The built-in Li-Po battery, if not handled properly, may explode, cause burns, or catch fire, resulting in a serious accident.

- ① Set the power switch of the helicopter to "OFF." Insert the charge connector into the charging port on the helicopter, and then plug the charger into a standard wall outlet. The LED lamp will light in red. The LED lamp lights in green if the charger is plugged from a wall outlet while the charge connector is not inserted into the helicopter.
- ①-1 Charging port
- 2 Red lamp on charger will light to show charger is operating. ②-1 LED lamp

When charging is complete, the LED lamp changes to green. Remove the charge connector from the charging port on the helicopter, then unplug the charger from the wall outlet. Battery charging time varies with the battery level. As a guide, it takes approximately 1 hour to charge when the battery is near empty, or 30 minutes if it is half-empty.



(1)

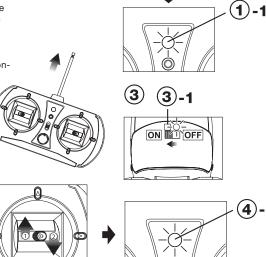
IV. HOW TO FLY

O Preparation for Flight

- 1 Turn on the switch on the transmitter. The LED lamp will start blinking.
 - ①-1 LED lamp (blinking)
- 2 Completely extend the transmitter antenna.
- 3 Turn on the switch on the helicopter body. The LED lamp will start blinking. When the LED lamp changes to steady, the helicopter is ready for flight.
- 3-1 LED lamp
- 4 Move the throttle stick to the top position, then to the bottom. The transmitter is ready when the LED lamp changes from blinking to steady.
- 4-1 LED lamp (steadily lighting)

Note: Stay at least 6 feet (2 meters) away from the helicopter before flying. For safety, be aware of your environment. If no obstacles exist, you are ready to fly.

0



ON

OFF

0

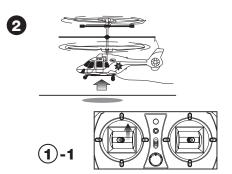
0 Transmitter Functions

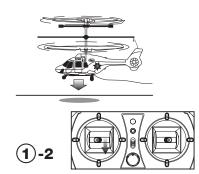
1 Throttle stick (left stick) (Up/Down)

Moving the throttle stick up allows the helicopter to ascend: moving the stick back makes the helicopter descend. The controls are proportional, which means a little stick movement will give a little throttle, a lot of stick movement will give a lot of throttle.

①-1 Up

①-2 Down



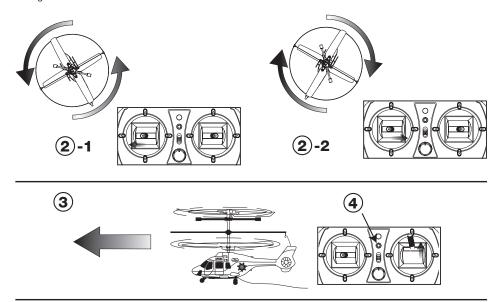


② Rudder stick (left stick) (Left/Right)

Moving the rudder stick left allows the helicopter to turn left; moving the stick right makes the helicopter turn right.

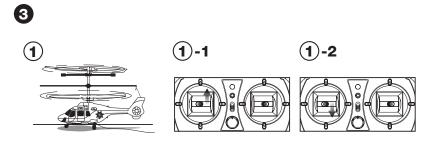
@-1 Left turn

2-2 Right turn



- 3 Elevator stick (right stick) (Forward)
- Moving the forward stick up allows the helicopter to fly forward.
- Search light button

Pushing the search light button above the power switch will turn the search light off and on.



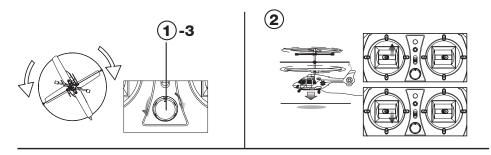
9 Get Acquainted with the Helicopter

① Slowly move the throttle stick up; the rotor starts rotating and the helicopter ascends. Since the ascending power varies in proportion with how far you move the throttle stick forward, adjust the throttle stick (left) to make the helicopter hover when it reaches a height of approximately 6 feet.

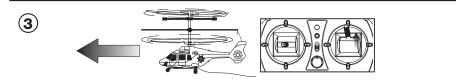
①-1 Up

①-2 Down

- If the helicopter tends to spin one direction or the other, turn the adjustment knob on the transmitter to correct it. ①-3 Adjustment knob
- ② To move the helicopter down, move the throttle stick (left) back more slowly than when moving the helicopter up. When the helicopter starts descending, hold the stick in its position. The helicopter will land gently by itself.



While the helicopter is hovering, moving the Elevator stick (right) up allows the helicopter to fly forward. The helicopter may experience a small descent as it flies forward. Slightly move the throttle stick up to correct it.



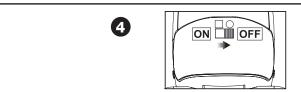
O After Use

Turn off the helicopter first, then turn off the transmitter. Be sure to retract the transmitter antenna.

⑤ The helicopter display base also functions as a helicopter landing pad. Installing 4 AA batteries (not included) will allow the landing pad lights to function. To install the AA batteries, turn the base upside down. Remove the screws securing the battery door. Insert 4 AA batteries, noting the correct polarity. Replace the battery door and secure using the included screws.

Important

This helicopter is equipped with a feature for monitoring the battery level of the built-in battery. The LED lamp blinks if the battery level becomes low. Turn off the switch when the LED lamp starts blinking. Failure to do so may adversely affect the batteries, resulting in permanent damage.

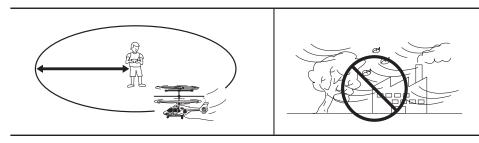


V. FLIGHT LOCATION AND CONDITIONS

Flight Area Precautions

Fly the helicopter in a place where the floor is flat and no obstacles exist. Avoid flying near fans, or heating and air conditioning vents when they are in operation and moving air in the room, otherwise the helicopter may become uncontrollable. Be sure to fly the helicopter in calm conditions.

Important: Adult supervision is required.



VI. MAINTENANCE

- The life of the helicopter can be extended with daily care. Wipe the helicopter clean if dust builds up and frequently check for any loose parts.
- The helicopter body is made of polystyrene foam. If damaged, use Scotch Tape or suitable adhesives to repair.
- Never use instant glue, which will make the polystyrene foam dissolve. Foam-safe (odorless) CA is the best to use for these repairs.
- The helicopter will lose balance and will not fly correctly if broken.

Replacement Parts		
SPJ1101	Ring Guard: Aerolite	\$3.99
SPJ1102	Rotor Blade Set: Aerolite	\$5.99
SPJ1203	Body Set: Nitewatch	\$5.99
SPJ1104	Transmitter Antenna: Aerolite	\$5.99
SPJ1105	Transmitter Battery Cover: Aerolite	\$3.99
SPJ1106	Battery Charger: Aerolite	\$15.99

TROUBLESHOOTING GUIDE

Points to Check When Helicopter Operates Abnormally.

- Make sure the power is on.
- Make sure the main battery and the transmitter battery have sufficient charge.
- Check that the transmitter battery is inserted with correct polarity.
- Check that the antenna of the transmitter is not broken.
- Check that the distance between the transmitter and the helicopter does not exceed 20m/65ft.
- Check that a nearby transmitter does not produce interference or signals with the same frequency. In such a case, move to another place or wait until the other RC user has finished operating his/her vehicle.

8

WARRANTY

Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

Limited Warranty

- (a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.
- (b) Limitations HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.
- (c) Purchaser Remedy Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law

These Terms are governed by Illinois law (without regard to conflict of law principals).

Safety Precautions

This is a sophisticated R/C product and must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a service technician.

Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. A Service Repair Request is available at www.horizonhobby.com on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support 4105 Fieldstone Road Champaign, Illinois 61822

Please call 877-504-0233 with any questions or concerns regarding this product or warranty.