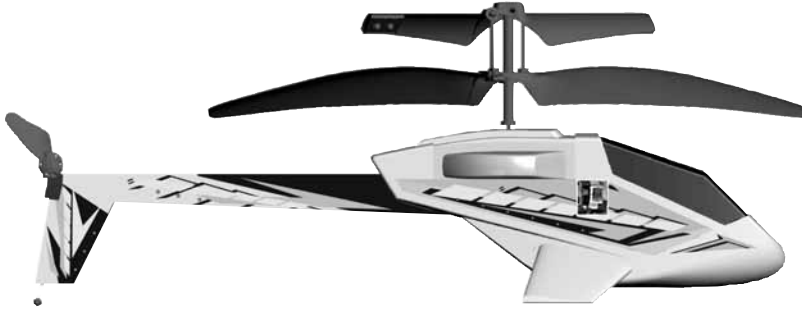




HAVOC HELI™



Key Features

For AH Havoc Heli™:

- Super wide IR control
- Miniature design for indoor flying
- Built-in Li-poly battery for long flying time
- Unique rotor-blade system for steady lifting-up
- Durable foam body
- Recharging through transmitter

For Transmitter:

- Two channels digital proportional control
- Tri-band A, B, C
- Alignment Trim
- Charging and power indicator

WARNING:
CHOKING HAZARD – Small parts.
Not for Children under 3 years.

“This product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.”



Do not touch the running propeller!
Do not play above someone's head!
Adult supervision is required!

Safety Precautions:

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

- Keep hands, hair and loose clothing away from the propeller when power switch is turned ON.
- Turn off transmitter and helicopter when not in use
- Remove battery from transmitter when not in use.
- Parental guidance is recommended for the flight.
- Keep your helicopter in your sight so that you can supervise it all the time.

- New and alkaline batteries are recommended for use in transmitter to obtain best and maximum performance.
- You are advised to replace with new batteries as soon as the function becomes impaired.
- Users should keep and retain this information for future reference.
- Users should keep strict accordance with the instruction manual while operation the product.
- Your Transmitter charger is tailor-made for the Li-Poly rechargeable battery used in Havoc Heli™. Do not use it to charge any battery other than that in the helicopter.

FCC Statements

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.

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 an experienced radio/TV technician for help.

Care and Maintenance:

- Always remove batteries from the toy when it is not being used for a long period of time. (Transmitter only)
- Wipe the toy gently with a clean damp cloth.
- Keep the toy away from direct heat.
- Do not submerge the toy into water that can damage the electronic assemblies.

Battery Cautions:

- Non-rechargeable batteries are not to be recharged
- Rechargeable batteries are to be removed from the toy before being charged (Transmitter only).
- Rechargeable batteries are only to be charged by an adult
- Different types of batteries or new and used batteries are not to be mixed (Transmitter only).
- Only batteries of the same or equivalent type as recommended are to be used.
- Batteries are to be inserted with correct polarity.
- Exhausted batteries are to be removed from the toy (Transmitter only).
- The supply terminals are not to be short-circuited.

Helicopter is equipped with a Li-Poly rechargeable battery, please also pay attention to the following cautions for safety use:

- Do not dispose the battery in fire or heat.
- Do not use or leave the battery near a heat source such as fire or heater.
- Do not strike or throw the battery against hard surface.
- Do not immerse the battery in water, and keep the battery in a cool dry environment.
- When recharging, only use the battery charger specifically for that purpose.
- Do not over-discharge the battery.
- Do not connect the battery to an electrical outlet.
- Do not directly solder the battery and pierce the battery with a nail or other sharp object.
- Do not transport or store the battery together with metal objects such as necklaces, hairpins etc.
- Do not disassemble or alter the battery.
- Charge the battery every 6 months.
- Turn off your equipment power switch after use.
- As for a used battery, please recycle after covering the battery terminals with insulation tape or inserting it to an individual poly-bag.

Note:

- Parental guidance is recommended when installing or replacing batteries.
- Under the environment with electrostatic discharge, the sample may malfunction and require user to reset the sample.

Special Note to Adults:

- Regularly examine for damage to the plug, enclosure and other parts. In the event of any damage, the toy must not be used with the transmitter charger until the damage has been repaired.
- This toy is not intended for children under 3 years old.
- This toy must only be used with the recommended charger
- Do not try to charge other batteries with transmitter Charger.

Battery requirement for Havoc Heli™:



Power Supply : ---
Rating : DC 3.7 V, 1.8 W
Batteries : 1 x 3.7 V Li-Poly Rechargeable Battery Pack
Requires 1 x 3.7 V Li-Poly Rechargeable Battery Pack (included)

Battery requirement for Transmitter:



Power Supply : ---
Rating : DC 9 V, 0.45 W
Batteries : 6 x 1.5 V "AA"/LR6/AM3
Requires 6 x 1.5 V "AA" size batteries (not included)



Pack List



Havoc Heli™



Transmitter



Spare Tail Propeller



Aluminum labels

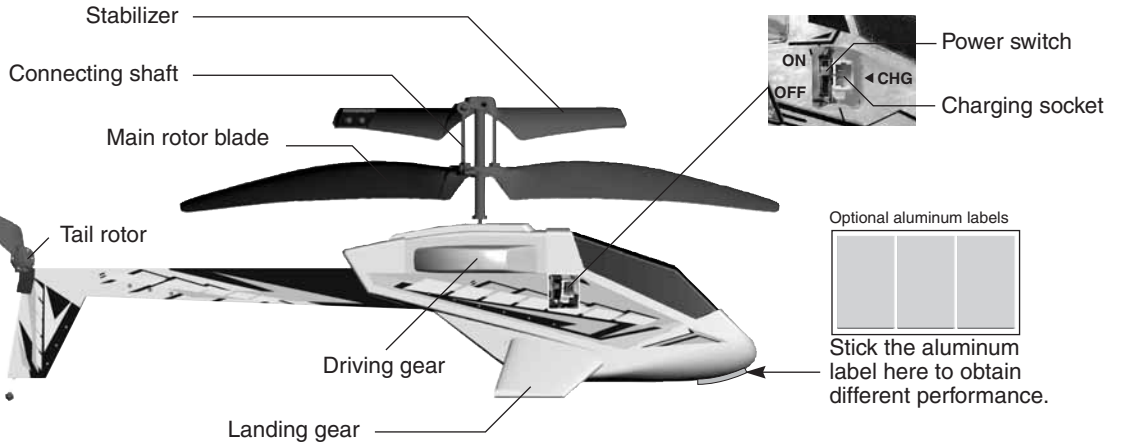
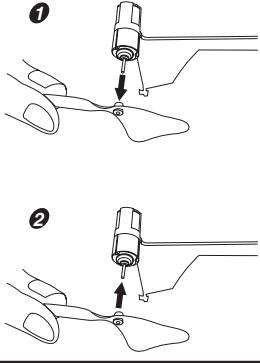


Instruction Manual

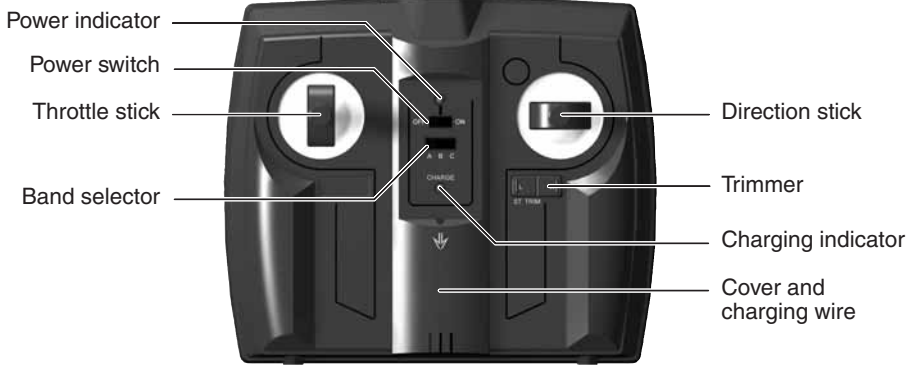
Parts Identification

Havoc Heli™

Caution: Spare tail propeller only to be replaced by an adult.



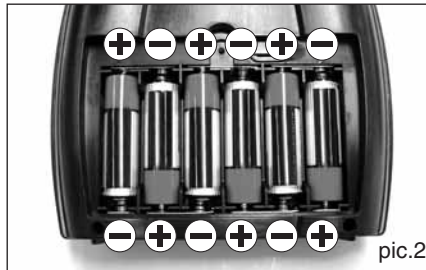
Transmitter



Battery Installation & Charging

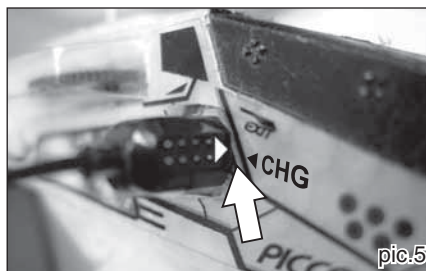
Battery Installation – Transmitter

1. Use a Phillips head (Cross-Head) screwdriver to loosen the screws on the battery case anti-clockwise (pic.1).
2. Put 6 AA size batteries in the battery compartment as per the polarity shown inside (pic.2).
3. Tighten the screw in clockwise (pic.3).



Charging Havoc Heli™

1. Pull out the cover and take out the charging wire (pic.4).
2. Turn off the power of helicopter. Insert the charging plug into the socket on the helicopter. (pic.5)
3. The green LED will light up when charging (pic.6). Once completed, the green LED will turn off. Pull the plug out of the socket on helicopter.
4. The helicopter can have about 5-6 minutes of flight time after 20-30 minutes charging.



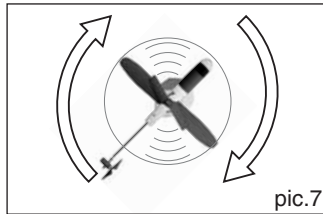
Note: Before you recharge the battery, wait for 10-15 minutes to have the battery cool down.

Flying Your Havoc Heli™

- Set the band on transmitter the same to the helicopter.
- Set the ON/OFF switch on helicopter to ON, the power indicator will flash, **BE SURE THE TRANSMITTER IS "OFF"** then turn on the helicopter.
- Place the helicopter on the ground with the tail point towards you and the nose facing away from you.
- Set the left stick on transmitter to MINIMUM throttle, and then set the power on.

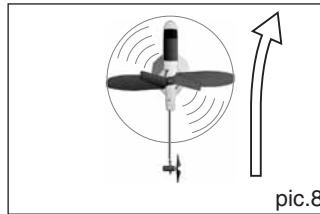
1. TRIMMING THE HELICOPTER:

- Gently push the throttle up to raise your helicopter about 0.5 to 1 meter high.
- When the helicopter spirals clockwise (pic.7) or keeps turning clockwise (pic.8), push and release the left side of trim repeatedly till the turning stops and helicopter flies straight (pic.9).
- When the helicopter spirals counter clockwise (pic.10) or keeps turning counter clockwise (pic.11), push and release the right side of the trim repeatedly till the turning stops and the helicopter flies straight (pic.12).

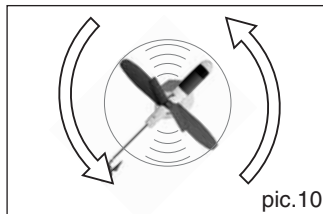
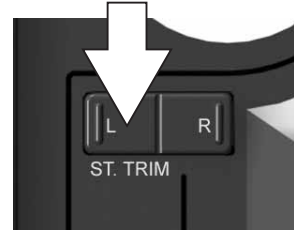


Spiral clockwise

or

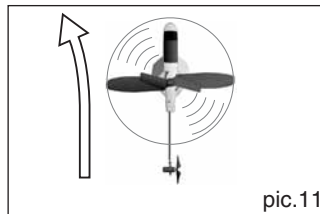


Keep turning clockwise

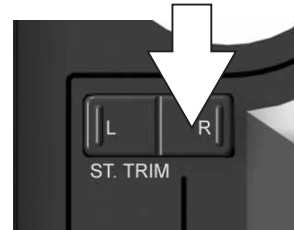


Spiral counter clockwise

or



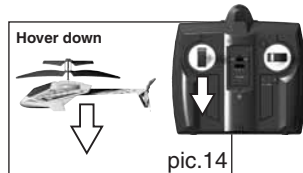
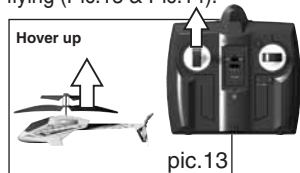
Keep turning counter clockwise



2. FLIGHT CONTROL:

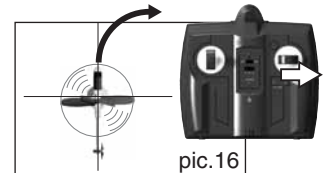
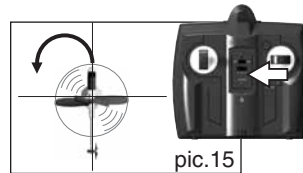
Hover up and down:

When the helicopter flies steadily, you can slowly push the throttle stick up to make helicopter fly higher, or release the stick a bit to make helicopter fly lower. Only small amounts of stick position change are required for smooth flying (Pic.13 & Pic.14).



Turn counter clockwise and clockwise:

Hold the helicopter at a height. Push the rudder stick toward left to turn counter clockwise (pic.15), and push the rudder stick toward right to turn clockwise (pic.16).



Accelerates & Decelerates:

If you turn the helicopter slowly to the counter clockwise, the helicopter will decelerate. And when turned it to the clockwise, it will accelerate.

Fly forward and stop:

The helicopter will take a slow forward speed when a gentle Clockwise turn is made. To make it stop, it is sufficient to give a short Counter clockwise turn command. By alternating this flight technique, the helicopter can be directed anywhere and come back to its starting position.

3. LIFT-OFF PROCEDURE (after Trimming procedure):

- Put the helicopter on a smooth surface. Uneven floor surface will affect its lifting off.
- Slowly increase the throttle.
- DO NOT look at the transmitter but focus on the helicopter.
- As soon as the helicopter leaves ground, reduce the throttle slightly. (in worst case, helicopter will go back to the floor, but that is better than crashing against the ceiling)
- VERY gently add the throttle if the helicopter goes down.
- VERY gently reduce the throttle if helicopter goes up.
- For turning, give short and small inputs to the direction stick. (Most beginners will easily overcontrol the helicopter)

4. ENVIRONMENT FOR FLIGHT:

Choose the place which meet the following condition:

1. Indoor environment with calm air condition. Beware of the air circulation from the air-conditioner.
2. Space area: It is recommended to have space area over 10ft(W) x 16.5ft(L) x 8ft(H).
3. Safety area: It is highly recommended that there is no electric fan, air-conditioner, reading lamp or other dangerous objects to flying.

Tip! OPERATION

- Your helicopter will be auto-protected while the helicopter crash into other obstacles, you need to switch ON/OFF button to ON again to restart the helicopter.
- Don't operate the helicopter under the direct sun or strong lighting; it will affect the control system of your helicopter.
- Don't cover the lens of the transmitter. No signal will be released while you cover the lens.
- Don't stick any other label onto the helicopter; the other label will affect receiving of IR signal.

Tip! CONTROLLING

- For controlling the sticks on transmitter, try not to push the sticks immediately to the extreme position. It should be like steering a bicycle rather than pressing computer game sticks.
- For the novice Pilot (after the trimming procedure was completed), it is highly recommended to focus exclusively on learning to control the Throttle stick first. Even if the helicopter may turn around a bit by itself, there is no need to keep it straight and keep it fly nicely. For the first flight, it is important to learn to keep the helicopter at a constant altitude of around 1 meter with small inputs on the Throttle stick. Once the Pilot masters this, he may start learning to take control with the direction stick.

Tip! SAFETY

- Read through the whole instruction Manual before starting to play your helicopter.
- This product is designed to be used only indoors. **Do not** use it outdoors unless in windless days without any small gusts of wind.
- **Never** fly in a place cluttered with obstacles (place full of furniture, people, pets etc.)
- **Make sure** you and other people keep 1-2 meters away from the helicopter while you start for flight.
- **Always** keep an eye on the flying helicopter to prevent it flying, landing or crashing on or near your head, your body and any other people.
- **Never** disassemble or attempt to modify the product. It may damage the product and cause danger.
- **Never** put hands or face close to rotating parts. Doing so create the risk of unexpected injury. To avoid such risk, never operate this product while sitting on the floor or on a chair. Operate this product in a posture that allows you to quickly get out of the way if necessary.
- **Always** switch off both the flying unit and transmitter when leaving transmitter unattended. If the power switch is left on, it is possible that unintended stick operation occurs, when the transmitter is placed on a floor or a chair.
- **Never** allow young children to use this product. Doing so creates the risk of accidents caused by the rotating parts.
- **Never** use parts that are damaged or have altered shape in this product to ensure safe practice.

Tip! TRIMMING

- The helicopter can be out of trim after some severe or multiple crashes, improper storage or changing of temperature... etc. You can simply solve this problem following the below procedures.

i) If the helicopter takes too much forward speed by itself



Step 1:
Take the tail
between fingers.



Step 2:
Twist tail anti
clockwise for
about 30°.



Step 3:
Release.

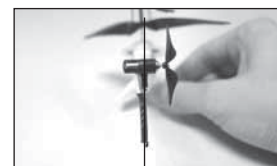
ii) If the helicopter takes too much backward speed by itself



Step 1:
Take the tail
between fingers.



Step 2:
Twist tail
clockwise for
about 30°.



Step 3:
Release.

Trouble Shooting

Symptom	Cause	Correction
Propeller can't move.	- ON/OFF Switch is OFF. - Weak Battery.	- Set switch to ON. - Re-charge the battery pack.
Suddenly stop and drop down when flying.	- Weak power.	- Re-charge the battery pack.
The helicopter does not react.	- Channel selection on transmitter is not correct.	- Reset the correct channel.
Loss of control.	- Another Infrared control device using the same channel. - Affected by strong lighting.	- Avoid these if possible, or choose another place to operate the helicopter. - Change another environment to avoid direct lighting.

For further questions and problem, please visit our website www.airhogs.com.

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