

SWARM™

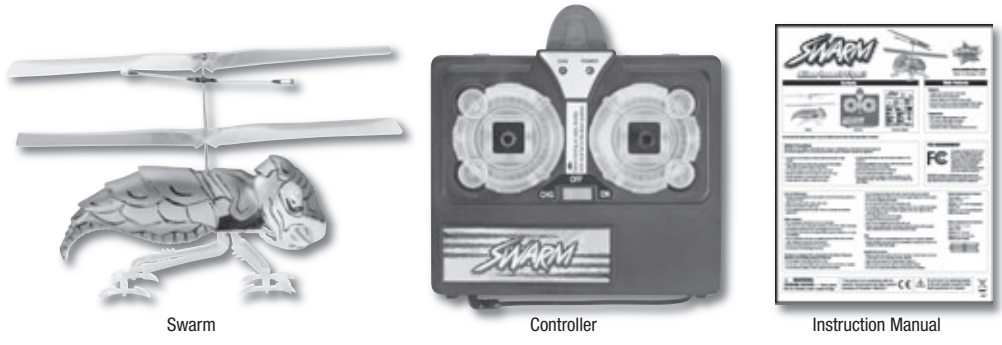
Alien Insect Flyer!



www.hobbicotoy.com

Hobbico, Inc., Champaign, IL 61826

Contents



Swarm

Controller

Instruction Manual

Main Features

Swarm:

- Durable, pre-colored foam insect body
- On/off switch and charging jack
- Counter-rotating rotor blades for stable flight
- Built-in LiPo (lithium-polymer) rechargeable flight battery
- Realistic left/right and up/down insect-like movement

Controller:

- Two-channel digital proportional control
- Trim knob to adjust flight orientation
- Charge status and power-on LEDs
- Easy Swarm battery recharging from the controller

Do not touch the spinning blades or fly over another person's head. Adult supervision is required.

Safety Precautions:

Warning: Do not modify or alter this unit. 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.

- Do not turn on the Swarm unless the controller has been turned on first.
- Keep hands, hair and loose clothing away from the spinning blades when the power switch is turned ON.
- Turn off the controller and Swarm when not in use.
- Remove the battery from the controller when not in use.
- Parental guidance is recommended while flying.
- Always keep your Swarm in sight while flying.
- For the best performance, use new alkaline batteries in the controller.
- Replace the batteries in the controller with new ones as soon as any function becomes diminished.
- Keep these instructions for future reference.
- Follow the operating instructions exactly.
- Your controller's built-in charger is made specifically for the rechargeable Swarm LiPo battery. Do not use it to charge any other battery.

FCC REQUIREMENT



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.

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

Care and Maintenance:

- Always remove batteries from the controller when it is not being used for a long period of time.
- Wipe the toy gently with a clean, damp cloth.
- Keep the toy away from direct heat.
- Do not submerge the toy into water. This could damage the electronic assemblies.

Battery Cautions:

- Non-rechargeable batteries are not to be recharged.
- If the controller uses rechargeable batteries, remove them before recharging.
- Rechargeable batteries should be recharged only by an adult.
- Do not power the controller by mixing different types of batteries, or old and new batteries.
- Use only batteries of the same or equivalent type as those recommended.
- Install batteries following the correct polarity.
- Remove exhausted batteries from the controller.
- Do not short-circuit the supply terminals.

The Swarm is equipped with a rechargeable LiPo battery. Please pay attention to the following cautions for safe use:

- Do not dispose of the battery into fire or heat.
- Do not use or leave the battery near a heat source, such as fire or a heater.
- Do not strike the battery or throw it against a hard surface.

- Do not immerse the battery into water. Keep the battery cool and dry.
- When recharging the battery, use only the charger designed for that purpose.
- Do not over-discharge the battery.
- Do not connect the battery to an electrical outlet.
- Do not directly solder the battery or pierce it 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 six months.
- Turn off your equipment power switch after use.
- Recycle used batteries after covering the battery terminals with insulation tape or inserting the battery into an individual polybag.

Note:

- Parental guidance is recommended when installing or replacing batteries.
- Static electricity may cause the toy to malfunction, requiring you to turn it off and back on before flying again.

Specific Note to Adults:

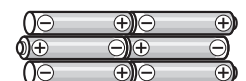
- Regularly examine all parts of the toy for damage. If any is found, do not use the toy again until the damage has been repaired.
- This toy is not intended for children under 3 years old.
- This toy must be used only with the recommended charger.
- Do not try to charge other batteries with the controller's charger.

Battery Requirements for Swarm:

Power Supply: =====
 Rating: DC 3.7V
 Batteries: 1 x 3.7V LiPo Rechargeable Battery Pack
 Requires: 1 x 3.7V LiPo Rechargeable Battery Pack (included)

Battery Requirement for Controller:

Power Supply: =====
 Rating: DC 9V
 Batteries: 6 x 1.5V "AA"
 Requires: 6 x 1.5V "AA" size batteries (not included)



WARNING:
CHOKING HAZARD — Small parts.
 Not for children under 3 years of age.

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

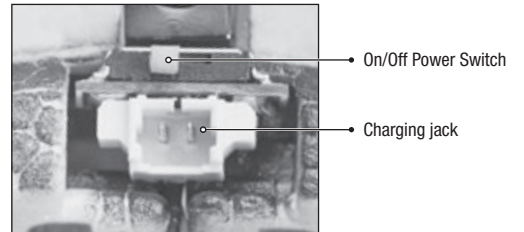
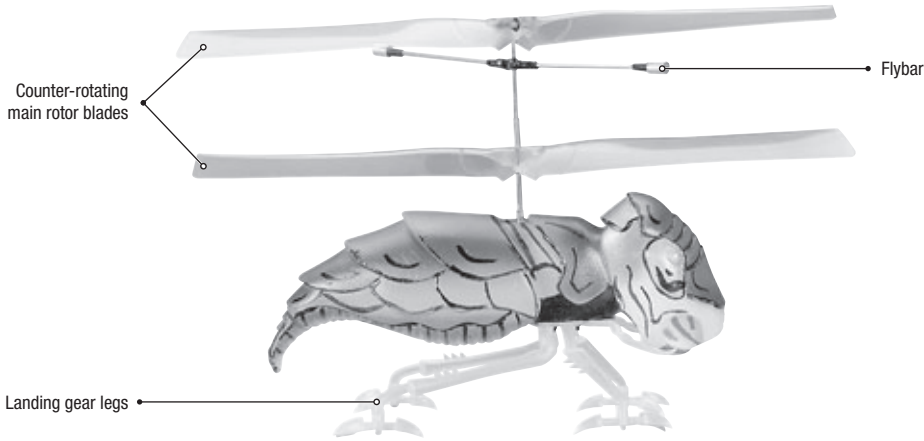


Do not touch the spinning blades or fly over another person's head. Adult supervision is required.

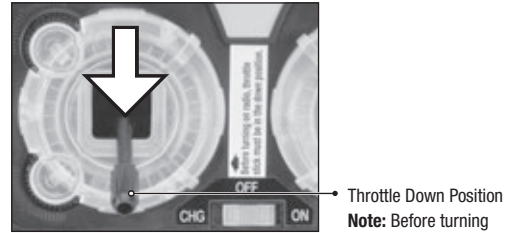
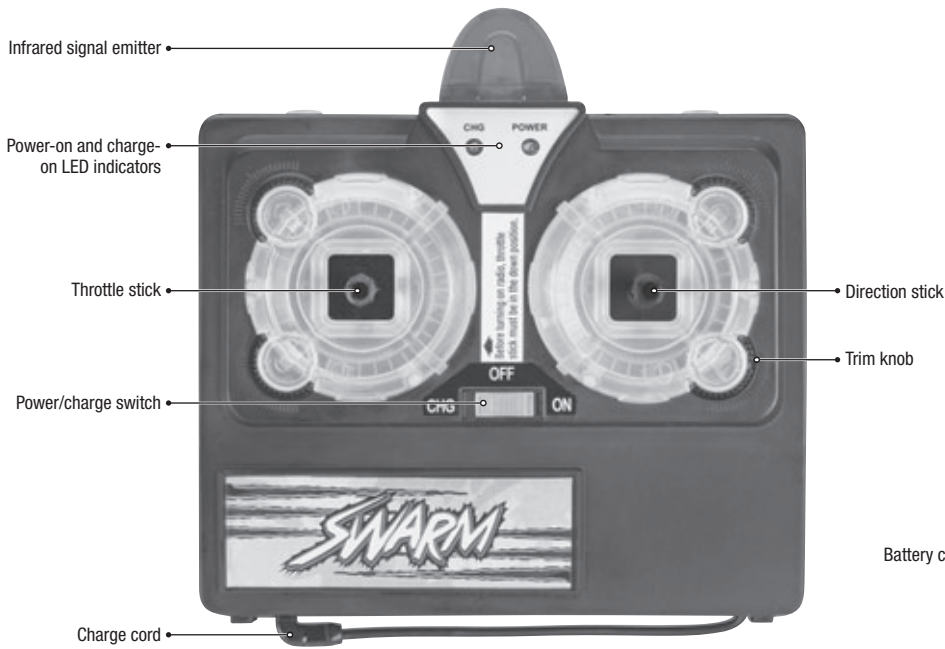


Swarm and Controller Parts

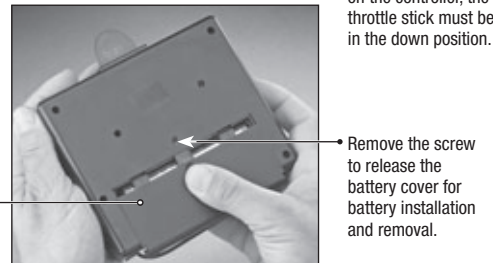
Swarm



Controller



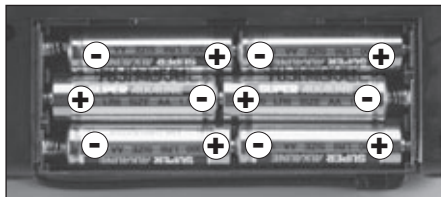
Note: Before turning on the controller, the throttle stick must be in the down position.



Controller Battery Installation



1. Remove the screw above the battery cover by turning it counter-clockwise using a Phillips-head screwdriver.



2. Install 6 "AA" size batteries in the battery compartment following the polarity shown inside.



3. Replace and tighten the screw clockwise.

Swarm Charging Procedure

Note: Before recharging the Swarm's LiPo battery after flying, always wait 10-15 minutes for it to cool down.

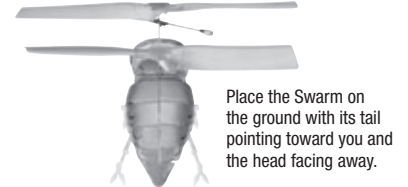
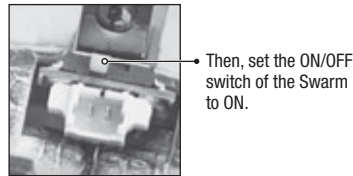
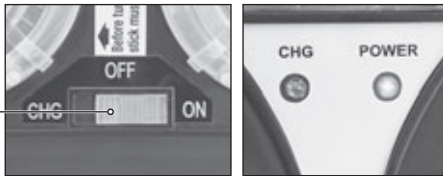
1. Turn off both the Swarm and the controller.
2. Pull out the charge cord from the bottom of the controller. (Pic 1).
3. Carefully plug the charging cord into Swarm (Pic 2). DO NOT FORCE. When inserted properly, the charging cord should fit easily in the charging port. Incorrect insertion of the charging cord will damage the Swarm and may create a hazard.
4. Turn the switch to the CHARGE position on the controller. (Pic 3).
5. The controller's Charge LED will start to flash. (Pic 4).
6. When the charge LED shines steadily without flashing, charging is complete.
7. Turn controller switch to the ON position before flying the Swarm.



The Swarm can fly for about 5-6 minutes after 25-30 minutes of charging.

Flying Your Swarm

With the throttle (or left) stick of controller in the down position, move the controller's power/charge switch to ON.



1. HOW TO TRIM:

- Gently push the throttle up to raise your Swarm about 1.5 feet (0.5 meter) to 3 feet (1 meter) high.

If the Swarm spirals to the right or keeps turning right, turn the trim knob counter clockwise until the Swarm flies straight.

Then, set the ON/OFF switch of the Swarm to ON.

Spirals right or

Keeps turning right

If the Swarm spirals to the left or keeps turning left, turn the trim knob clockwise until the Swarm flies straight.

Then, set the ON/OFF switch of the Swarm to ON.

Spirals left or

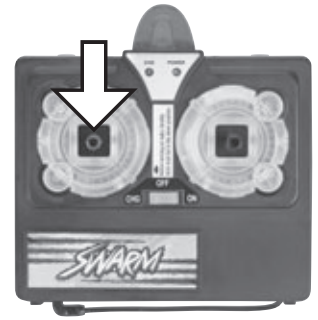
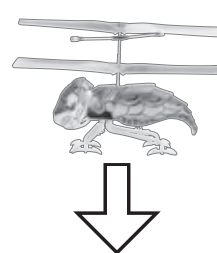
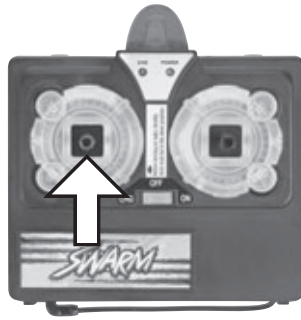
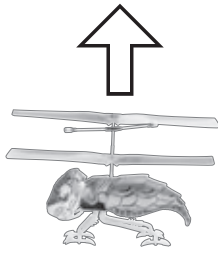
Keeps turning left

Flying Your Swarm (continued)

2. HOW TO CONTROL FLIGHT:

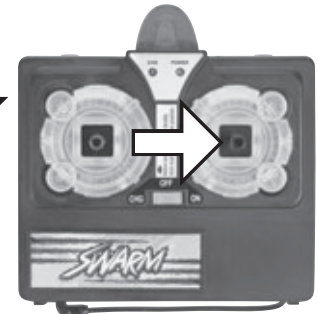
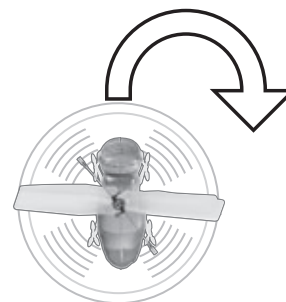
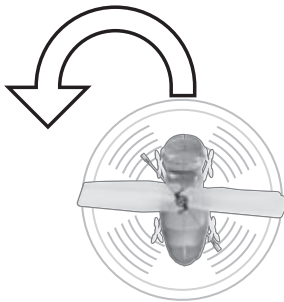
Up and Down Hovering:

From steady flight, slowly pushing the throttle stick upward will make the Swarm fly higher. To make it fly lower, just release the stick a little. Smooth flying takes only small changes in the stick position.



Left and Right Turns:

Hold the Swarm steady in the air. Push the direction stick left to turn it left, and push the direction stick right to turn right.



3. HOW TO LIFT-OFF (after Trimming):

- Put the Swarm on a smooth surface. An uneven floor surface will affect its take-off.
- Slowly increase the throttle.
- DO NOT look at the controller. Focus on the Swarm.
- As soon as the Swarm leaves the ground, reduce the throttle slightly. Adjust the throttle as necessary to maintain altitude.
- Gently add throttle if the Swarm goes down.
- Gently reduce throttle if the Swarm goes up.
- For turning, give short and small inputs to the direction stick. (Most beginners will initially over-control the Swarm.)

4. FLIGHT LOCATIONS:

Choose a location that meets the following criteria:

1. Indoors, with little air movement. Avoid circulating air from heating and air conditioning.
2. Room sizes should be at least 10 feet (3 m) wide x 10 feet (3 m) long x 8 feet (2.4 m) high.
3. Avoid flying in areas with electric fans, air conditioning, reading lamps or other objects that could interfere.

Safety Tips

- Read through the entire instruction manual before flying your Swarm.
- This product should be flown only indoors.
- Make sure that you and other people stay 3 to 6 feet (or 1 to 2 meters) away from the Swarm while you begin flight.
- Always keep your eye on the flying toy to prevent it from flying, landing, or crashing on or near your head or body, or on other people.
- Never disassemble or attempt to modify the Swarm. You could damage the product and create the potential for damage or injury.
- Never put your hands or face close to rotating parts. Doing so risks injury. Never operate the Swarm while sitting on the floor or on a chair — always fly from a position that lets you get out of the way quickly if necessary.
- Always switch off both the Swarm and the controller when you leave the controller unattended. If the power switch is left on, unintended stick operation might occur (for example, if the controller falls face-forward onto the floor).
- Never let young children use this product. Doing so risks accidents caused by the rotating parts.
- Never use parts that are damaged.

Operating Tips

- Always move the controller's throttle stick to the down position after a crash.
- Do not fly in direct sunlight or very bright lighting — these can affect the control system of your toy.
- Do not cover the infrared signal emitter of the controller. If you do, no signals can be sent to your Swarm.
- Do not place any other labels or stickers onto the Swarm. These will interfere with its ability to receive the infrared signal.
- Two Swarm models cannot be flown on the same radio band.

Control Tips

- When moving the sticks of the controller, avoid pushing them immediately to the extreme positions. They should be moved gradually like steering a bicycle, not sharply like operating computer game joysticks.
- After completing the trimming procedure, beginner pilots should focus exclusively on mastering the throttle stick first. Even if the Swarm turns around a bit by itself, there is no need to keep it flying straight — just learn how to maintain a constant altitude of about 3 feet (or 1 meter) with small inputs from the throttle stick. After accomplishing that, you can learn to take control with the direction stick.

Trouble Shooting

Problem: Blades can't turn.

Cause: • ON/OFF switch is OFF.
• Weak battery.

Solution: • Set switch to ON.
• Recharge the battery.

Problem: Swarm suddenly stops flying and drops.

Cause: Too little power.

Solution: Recharge the battery pack.

Problem: Loss of control.

Cause: • Another infrared control device is interfering.
• Strong lighting is interfering.

Solution: • Avoid other devices with infrared controls.
• Choose another flying location.