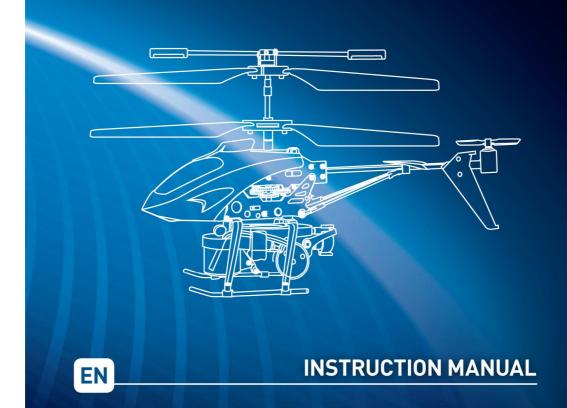


# **Bubble Bomber**

RC Helicopter blasts bubbles at the push of a button!



#### Introduction

Congratulations on your purchase of this Swann Bubble Bomber!

This instruction manual will help you with:

- Installing batteries into the provided controller
- Charging the Bubble Copter
- Using the controller

## Safety Precautions



Choking Hazard - small parts, keep out of reach of small children.



Danger - Never insert sharp objects, pins or screws into the helicopter as this may puncture the internal battery.



**Warning** - do **not** fly near eyes or faces.



Caution - Do not touch the running rotors. Do not fly above or near someone's head. Adult supervision is required at all times.

- Keep hands, hair and loose clothing away
  from the rotors when the power switch is turned on.
- Turn off the controller and helicopter when not in use.
- Remove batteries from the controller when ont in use.
- Parental guidance is required for younger
- Keep your helicopter close and within line of sight - if line of sight to the controller is lost, you may lose control of the helicopter.
- For best performance, only use fresh Alkaline "AA" batteries in the controller.
- Read and obey all warnings and safety guidelines in this manual.
- The controller and charger are specifically designed to charge this helicopter. Never use other charging equipment.
- The helicopter is NOT intended for use by children under fourteen (14) years old, unless directly supervised by competent adult at all times.
- Regularly examine the helicopter and controller for any damage to the plugs, enclosure, rotors, battery covers and other parts. In the event of any damage, neither the helicopter nor the controller should be used.

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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**

- To clean, wipe gently with a damp cloth. Avoid use of solvents, as these can damage the plastic components.
- Always remove the batteries from the controller when not being used for extended
   durations.
- Do not submerge the helicopter or remote control in water. This will damage the electronic components, and could pose a severe risk to the built-in battery.
- Keep the helicopter and remote away from heat sources.

## **Installing batteries**

Remove the battery cover on the back of the controller, and insert 6 new "AA" batteries inside the battery compartment. Follow the polarity (+/-) markings, and then replace the battery cover.



## **Charging the Bubble Bomber**

The Bubble Bomber is equipped with a 3.7V Li-ion battery and is not fully charged at shipment. There are multiple ways that you can charge the Li-ion battery. You can use the provided USB cable connected to your computer to charge, or you can use the charging cable located on the side of the controller. For best performance, charge the Li-ion battery for the first time for at least 2 hours before use. Subsequent charges should take around 30 to 60 minutes.

#### Charging via USB

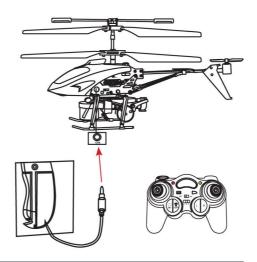
Plug the USB end of the charging cable into a spare USB port on your computer. Then, connect the other end to the Bubble Bomber. Never connect the Bubble Bomber to a USB port supplying anything other than 5V @ 500mA. There is a red LED inside the USB plug, this will turn off when the cable is connected to the "CHA" socket on the Bubble Bomber. The LED will turn on when the Bubble Bomber is fully charged. Make sure the "ON/OFF" switch on the Bubble Bomber is on the "OFF" position when charging. The Bubble Bomber takes 30 to 60 minutes to charge.



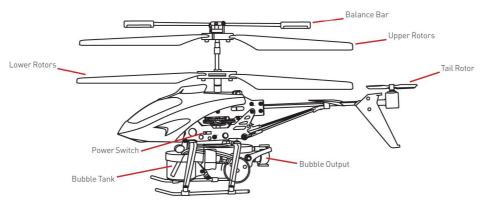
## Charging the Bubble Bomber (ctd)

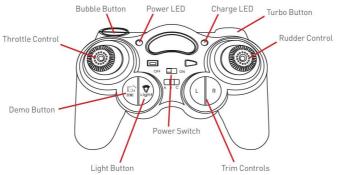
#### Charging via Remote Control

Open the charging lead compartment located on the right-hand side of the remote control and extend the lead. Turn on the remote control and connect the charging lead to the "CHA" socket on the Bubble Bomber. You will see a red LED, which indicates that the remote control is turned on, and a green LED, which indicates that the Bubble Bomber is charging. The green LED will turn off when fully charged. Make sure the "ON/OFF" switch on the Bubble Bomber is on the the "OFF" position when charging. The Bubble Bomber takes 30 to 60 minutes to charge.



## **Prepairing for Flight**

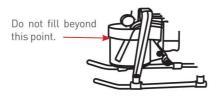




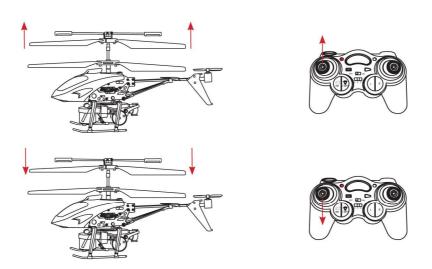
## Flying the Bubble Bomber

To start flying, turn on the remote control and the Bubble Bomber. The remote control and the Bubble Bomber will automatically pair with each other. You will see a red LED on the remote control and a set of flashing lights on the Bubble Bomber. You are now ready to fly.

Bubble Solution: Included with the Bubble Bomber, is a bottle of bubble solution and an injection bottle. Unscrew the cap and puncture the protective foil with the injection bottle. Insert the injection bottle into the bottle of bubble solution and squeeze to fill. Insert the injection bottle into the bubble tank located on the Bubble Bomber and squeeze to fill. Wipe up any excess solution before flying.



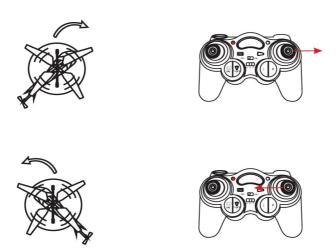
## **Basic Maneuvers**



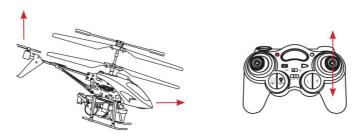
Moving up and down: The Bubble Bomber moves up and down by varying the speed of its main rotors. You can control how fast these spin by using the throttle control (left stick) on the remote control. Pushing the throttle control up will increase the throttle.

To get the best results, use gentle and subtle movements. Small adjustments made slowly and carefully are the best way to get the Bubble Bomber to fly well. Be careful when easing off the throtle - if the throttle stalls, the Bubble Bomber will fall to the ground and might not be able to recover in time, even if you jam the throttle back on.

## Basic Maneuvers (ctd)



Rotation: To rotate the Bubble Bomber, move the rudder control (right stick) to either side. This will cause the rotors to change their speeds relative to one another, causing the body of the Bubble Bomber to spin on the spot. While moving forward, moving the rudder control to the left or right will turn the Bubble Bomber in the direction that you want to fly to.



Forward & Backwards: The rudder control (right stick) also affects the Bubble Bomber's direction of travel.

Pushing the rudder control up will pitch the Bubble Bomber forwards. The opposite is also true, pushing the rudder control down will pitch the Bubble Bomber backwards and move it in reverse.

Demo Button: Pressing the "Demo Button" allows the Bubble Bomber to take over the rudder control automatically for a brief time. All you need to do is control the throttle.

Bubble Button: Pressing the "Bubble Button" allows the Bubble Bomber to blow bubbles while flying.

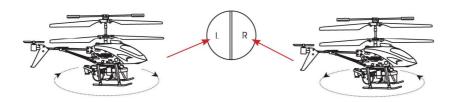
Light Button: Press the "Light Button" to turn the flashing lights off and on.

Turbo Button: Press and hold the "Turbo Button" to make the Bubble Bomber fly faster.

## **Adjusting the Trim**

If you find that the Bubble Bomber is turning slowly left or right when you're not using the rudder control (right stick), then you'll need to adjust the trim.

If the Bubble Bomber is rotating clockwise, press the "L" button until it stops moving. If the Bubble Bomber is rotating counter-clockwise, press the "R" button until it stops moving.



## Flying Guide

Wind: Basically, the Bubble Bomber is a replica of a full-sized helicopter. A full-sized helicopter wouldn't be able to fly in high winds – and neither can the Bubble Bomber. If a full-sized helicopter would have difficulty overcoming 50mph winds, then the Bubble Bomber will have the same difficulty with 0.625mph winds (i.e. 1/80th as much).

Air conditioning: Hot air rises and cool air falls – this creates movement in the air, leading to an effect called "wind shear". Basically, this is when there's a column of hot air going up next to cold air going down. Many full-scale aircraft accidents have been caused by wind shear. Air conditioners create heaps of wind shear. If the Bubble Bomber flies through wind shear, it will seem to suddenly fly up or down (depending on the direction of the wind shear).

The Ground Effect: When the Bubble Bomber is near the ground, the air it pushes down with its rotor has nowhere to go- the ground is in the way. Some of this air bounces back; this pushes the Bubble Bomber up. When the Bubble Bomber is near the ground, it will get slightly more lift than it normally would. This is something to keep in mind when landing.

The Ceiling Effect: Conversely to the ground effect, when you fly too close to a ceiling, a small pocket of low pressure is created above the Bubble Bomber, and it will be sucked upwards. This could be bad – if you hit the ceiling, the Bubble Bomber will stall, fall and possibly be damaged.

Places to Fly: Because high winds can be a problem, we recommend flying indoors. However, you really do need a bit of space to get the most out of the Bubble Bomber. Some places which are good for flight include large garages (whilst the car's not parked there), indoor sports areas or a reasonably sized lounge room.

## FCC Compliance Information (for USA)

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#### WARNING

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