

MACH II REMOTE CONTROL BLIMP/FLYING SAUCER



CAUTION: HELIUM FILLED PRODUCT:

NOT RECOMMENDED FOR CHILDREN UNDER 8 YEARS OF AGE.
AS WITH ANY HELIUM FILLED PRODUCT, PRECAUTIONS SHOULD
BE OBSERVED DURING HANDLING AND USE TO PREVENT
INJURY OR DAMAGE TO PROPERTY.

IMPORTANT

BEFORE ATTEMPTING TO OPERATE THIS FLYING DEVICE, ALL
PILOTS MUST CAREFULLY READ AND UNDERSTAND INSTRUCTIONS

Warning!

This blimp/flying saucer is for indoor use only!

Manufacturer is not responsible for any loss or damage to the balloon that may occur if balloon is used outdoors.

Be careful. **HOLD THE BALLOON SECURELY BY THE FILLER VALVE** after it is filled because the balloon could fly away!

Do not continue to fill balloon after it gets firm because it could burst.

The balloon expands when the temperature rises. If you completely fill the balloon at a cold temperature and the room temperature increases, the balloon may rupture or burst.

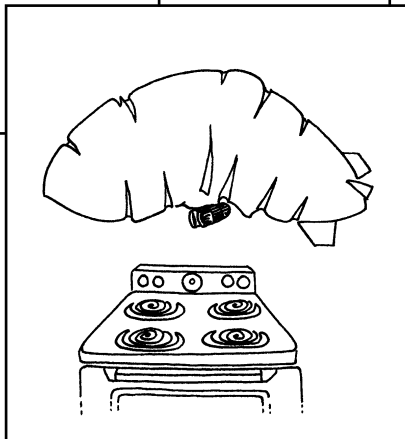
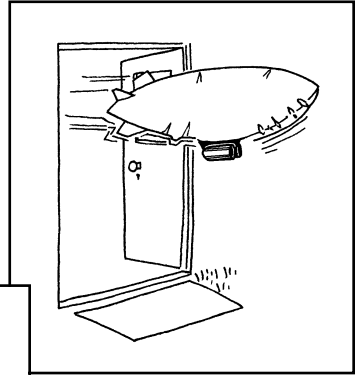
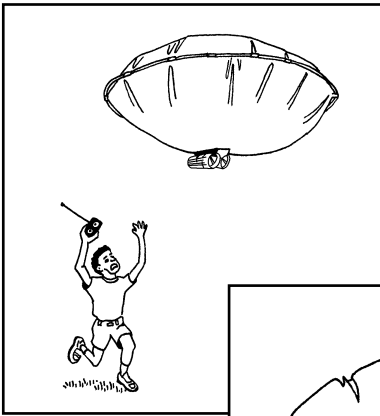
Do not leave the helium filled balloon in a car as it may rupture or burst as the temperature in the car rises (the helium will expand).

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Important Safety Information

- Do not use this product outdoors! You run the risk of losing it or creating a danger for aircraft!
- Operate the airship skillfully so that it does not hit people. Never fly the airship near little children or pets.
- Never let the airship operate near anyone's face. If the airship gets close to anyone's face, stop operating the control sticks (stops the propellers).
- Do not use near electrical appliances as the metallized nylon conducts electricity.
- Do not use near sources of heat as this could melt a hole in the metallized nylon.
- Pointed objects will damage the airship/saucer. If the airship/saucer frequently bumps into objects during flight, it will wear and helium gas will leak even though there does not appear to be a hole.
- Do not store the airship in a place where the temperatures could rise causing the balloon to rupture or burst.
- Never touch the circuitry with a metal object or let it come in contact with moisture.



Component List

1 - 52" Metallized Nylon Blimp Envelope.

or

1 - 36" Metallized Nylon Saucer Envelope.

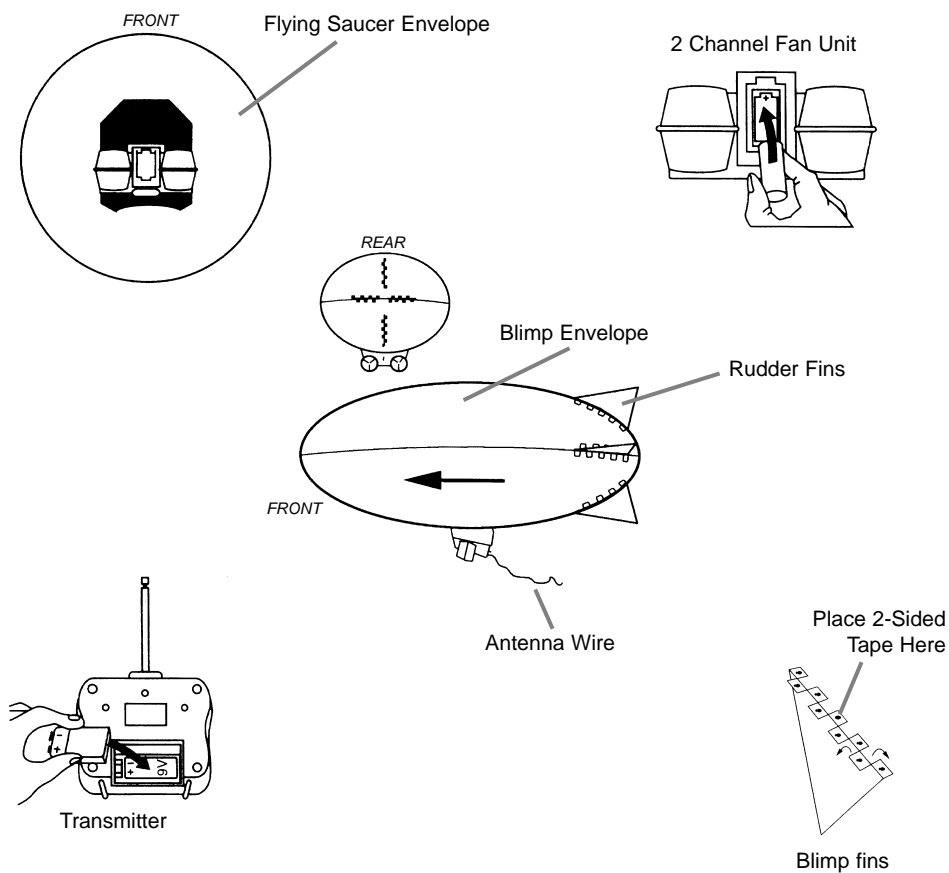
1 - Radio Transmitter.

1 - Gondola equipped with 2 micro motors and radio receiver.

4 - Tail fins (if blimp was ordered).

Ballast putty to achieve neutral buoyancy.

Detailed Components



Assembly

Fill the envelope with helium gas through the re-sealable valve until the envelope becomes firm, without over stressing the envelope seams. To close the valve, simply press the valve back together and it will not leak. Make sure the tank nozzle is for mylar balloons, other nozzles will tear the valve and the ballon may slowly leak.

Warning! Do not overfill the airship. They are sized and designed to be loosely filled. The helium expands with a rise in temperature. If you completely fill the airship at a cold temperature and the room temperature rises, it will burst.

Attach the tail fins to the rear of the envelope with double sided tape (blimp only).

Pinch the bottom seam of the airship envelope to determine the balance point and attach the gondola, pointing forward with antenna hanging straight down, with double sided tape. The airship looks better with the filler valve taped flat against the envelope surface.

Install a 9 volt Alkaline battery (sold separately) in the battery holder of the transmitter and a 3 volt Lithium (sold separately) in the battery holder of the gondola. Be careful to observe the plus and minus markings.

Use supplied ballast putty for ballast weight and adjust so that the airship floats neutral in the air (won't float up or down). Make sure you are far from any ventilator, air-conditioner outlet, or any other source of wind.

If the airship sinks down, remove some of the putty until it floats neutral.

If the airship sinks down without any ballast attached, carefully add some more helium into the balloon (not too much, envelope can burst). Adjust and repeat until the airship suspends in the air when released. If the problem persists, deflate and try refilling envelope with fresh helium.

If the airship rises, add some more putty until it floats neutral.

Important! The balloon will stay filled for approximately 1-2 weeks. Helium will slowly dissipate, which is normal. The balloon will begin to sink to the floor. Add a small amount of helium to the envelope and repeat the balancing adjustments above.

Accessories Available

9 volt Alkaline battery	\$2.95
3 volt Lithium battery	\$5.95
36" flying saucer envelope	\$5.95
52" blimp envelope	\$14.95
Draganfly Innovations T-shirt S, M, L, XL.....	\$14.95
Draganfly Innovations Ball-cap.....	\$12.95
Draganfly Innovations Throwing Disc	\$9.95

Flying

Flying the Remote Controlled Flying Saucer / Blimp can be both easy to learn and challenging to master!

The best way to learn to fly the airship is to just have fun flying in your living room.

The controls are situated so that pushing the two transmitter sticks forward causes the saucer to thrust ahead. Pulling both sticks backwards will cause the saucer to thrust backwards and descend. To turn right or left, you may push one stick forwards by itself and the craft will turn the opposite direction of the stick you are pushing forwards - ie: pushing the right stick forwards will cause the saucer to rotate and turn to the left.

Sharper turns can be achieved by reversing one motor while forward thrusting the other, however some altitude may be lost. To gain altitude, push both sticks forwards for several seconds, The amount of climb depends on the angle or attack of the turbofan unit, which is controlled by the placement of the turbofan unit on the balloon.

Ballast can also have an effect on rate of climb. If you would like to increase the rate of climb and descent, you may choose to set the ballast so that the saucer has very slight lift. Always turn on the transmitter first, followed by the receiver (gondola).

The higher you fly in tall rooms, the warmer and lighter the airship can get. The ceiling may also have fans turning or other sharp and destructive objects. If concerned, make the airship slightly heavy.

Change the battery when the movement of the airship weakens.

To permanently store the airship, remove the gondola and then remove all the helium by carefully inserting a straw in the filling valve and gently apply pressure to the envelope to squeeze the helium out. To get the last of the helium out, lay the envelope on a clean, flat, smooth surface and gently roll up the envelope towards the filling valve.

Most new pilots tend to use too much thrusting power when beginning to fly and find that they are crashing into walls and generally losing control of the saucer. When learning to control the saucer, it is best to use the thrusters conservatively. A one second burst of the turbofan will cause the saucer to hover for several seconds. If you use longer bursts when you are just learning to fly, you will always be over-correcting the course of the airship. The best method of learning to fly the saucer is to use short bursts of power and then observe the saucer to see how it reacts to your control.

Envision a NASA Astronaut controlling his jetpack during space walks on shuttle missions - the same methods of control apply to the saucer! Try to imagine that you are inside the saucer and facing forwards from the saucer's viewpoint - this helps to keep track of Right and Left. Eventually when you are a seasoned pilot the sky is the limit in what you can do with your Draganfly Innovations flying saucer / airship!

Hint! To retrieve a stuck or stranded airship from the ceiling, attach a loop of 2 sided carpet tape to the top of a helium filled latex balloon and raise it up on a string and stick it to the airship.

Troubleshooting

PROBLEM	SOLUTION
Airship stops responding.	<ul style="list-style-type: none">• Batteries have low voltage, replace batteries.• Airship out of range, move closer to the airship.• Radio interference from another source, fly in another area.
Airship sinks to the floor.	<ul style="list-style-type: none">• You have too much ballast putty on it, remove some.• You have reached the point where more helium is needed, add some helium• Helium has become corrupt, replace helium.
Airship rises to the ceiling.	<ul style="list-style-type: none">• You do not have enough ballast putty on it, add some more.• Too much helium in envelope, remove some of the helium.

Notes

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I N N O V A T I O N S I N C

INVENTING THE FUTURE OF RADIO CONTROLLED FLIGHT