



# COSMIC FLYER<sup>®</sup>

## Flight Manual



[www.megatech.com](http://www.megatech.com)

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If you have questions about operating or installing your new Megatech product, or if you are missing parts... Please Call Megatech First!

## **DO NOT RETURN THIS PRODUCT TO THE STORE**

*Call our Customer Service Department at:*

*(201)662-2800*

*10:00am - 5:00pm, EST Monday through Friday (except holidays)*

Technical assistance is also available on-line at [www.megatech.com](http://www.megatech.com)  
or by e-mail to [info@megatech.com](mailto:info@megatech.com)

**Congratulations!** You have just purchased one of the EASIEST planes to fly in the world! Learning to fly has never been so fun! Get ready to launch into gravity-defying action with Megatech's Cosmic Flyer! Climb to heights over 500 feet, at speeds over 25 MPH/40KPH... no experience needed! Cosmic Flyer's clever design and easy-to-use controller make it simple to go from beginner to expert in minutes!

### **Please Read ALL Instructions Carefully Before Attempting to Fly!**

If you experience any problems, DO NOT take your Cosmic Flyer back to the store! Call one of our MegaTechnicians at 1-888-MEGA-911 or send an e-mail to: [info@megatech.com](mailto:info@megatech.com)

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## SAFETY WARNINGS



Please read these before operating your Cosmic Flyer.



### General

- Do not fly your airplane if other models are being operated on the same frequency in the area.
- Do not attempt to disassemble any of the airplane's components or allow them to get wet. Electrical damage may occur.
- Never fly your airplane from roadways or after dark.
- Always fly your airplane in a wide open area, free from wires, trees and other obstructions.
- When operating/flying, always be aware of the spinning propeller. Be careful not to let it come close to your body, other people or loose clothing. Keep spectators behind you when flying.
- Since your airplane is controlled by a radio link, it is very important to always use fresh dry cell batteries in the transmitter.
- Before flying, make sure you perform a range check and can maintain control at least 25 feet from transmitter to plane with the transmitter antenna collapsed.
- No solvents or liquid cleaners should be used to clean this model. Doing so may damage the plane. Use a dry, soft cloth for cleaning.

### Batteries

- **Never** leave the flight pack battery unattended while charging. It can get very hot. Only charge the flight pack battery until it becomes warm, not too hot. This should take 1-2 hours.
- To prevent damage to your flight pack battery from overheating, allow the pack to cool completely after each flight before recharging.

### Radio

- **Safe radio operation tip:** The transmitter should always be the first thing you turn on - and the last thing you turn off.
- The transmitter's antenna must be fully extended for optimum radio link during flight.
- The flight pack battery should never be left in the plane while not in use.
- Do not trim the airplane's antenna. It is cut to a specific frequency length. To do so would drastically affect radio range.
- **Never-never-never** disassemble any of the radio components or expose them to moisture.

## Getting Acquainted with Your Cosmic Flyer

- First make sure the contents of your package are complete:

1. Cosmic Flyer Fuselage
2. Main Wing
3. Transmitter
4. Transmitter Antenna
5. Battery
6. Charger
7. Wind Detection Ribbon
8. Wing Bands
9. Vertical Tail
10. Horizontal Tail
11. Main Landing Gear
12. Rear Landing Gear
13. Propellers



14. Battery Hatch Cover

15. Motor Start Button

## Installing the Transmitter Batteries



**Caution:** Never mix old and new batteries. Only use fresh alkaline (non-rechargeable) batteries in the transmitter to assure best radio signal link. The transmitter requires 8 “AA” batteries.

- Install the transmitter antenna by screwing it into the hole in the top of the transmitter as shown.
- Remove the battery compartment hatch on the back of the transmitter.
- Install 8 fresh “AA” alkaline batteries, paying careful attention to proper “+” and “-” polarity.
- Slide the battery hatch cover back into place until it locks.
- Turn your transmitter on by sliding the “on” switch on the front of the transmitter. Both the green and red lights on your transmitter should be illuminated. If they are not, make sure you are using all fresh alkaline batteries and recheck that the batteries have been inserted using the proper polarity. If you still have problems, contact Megatech.



**DO NOT ATTEMPT TO FIX THE TRANSMITTER ON YOUR OWN.**

## Charging the Flight Pack Battery



- We use the latest NiMH (nickel-metal-hydride) technology available. Do not be alarmed by short flight times at first. NiMH batteries do not achieve their full potential until they have been charged and discharged 3 or 4 times. After that, you should be attaining full flight times. **NEVER LEAVE A CHARGING BATTERY UNATTENDED!!** Always let the flight pack cool before recharging.

- Connect the battery to the wall charger.
- Note: Only use the included charger or one that is approved for use with this battery.
- Plug the charger into an electrical outlet.
- Children must have parental supervision during the charging process.
- Charge the battery for 1-2 hours.



- Always monitor the charging process. The flight pack should become good and warm, but do not let it become extremely hot! **DO NOT OVERCHARGE THE BATTERY.** Use extra caution when touching the battery because it may become very hot.

## Attaching The T-Tail & Landing Gear

- Remove the nuts from the threaded shafts on the Vertical Tail/Rudder and put them in a safe place as you will need them to complete the assembly process.
- Slide Vertical Tail/Rudder through the Horizontal Tail/Elevator making sure to line up A to A and B to B as shown (Figure 1).
- Locate the wire pushrod which is attached to the tail boom of the airplane. Slide the end of the pushrod through the outermost hole of the control horn located on the Vertical Tail/Rudder as shown (Figure 2).



Figure 1



Figure 2

- Slide the tail unit through the tail boom of the airplane (Figure 3) until t-tail unit is flush with the tail boom.
- Slide the Rear Landing Wheel onto the t-tail shafts as shown (Figure 4) making sure to keep the wheel closest to the rear of the airplane.
- Now take the 2 nuts that you set aside earlier and attach to the t-tail shafts until snug. **DO NOT OVER TIGHTEN**
- Locate the main landing gear and the main landing gear slot on the bottom of the fuselage. Squeeze the wheels together as you slide the unit into the slot on the fuselage as shown (Figure 5). Once inserted completely, release and spread the wheels apart.



Figure 3



Figure 4



Figure 5

### Attaching the Propeller

- Holding the fuselage of the airplane as shown (Figure 6) push the propeller onto the prop shaft with a steady, firm push until propeller is approximately 6mm from the fuselage.



Figure 6

### Attaching the Main Wing

- Place the main wing onto the fuselage with the wingtips curving upward and pointing toward the tail (Figure 7).
- Make sure the small arrows imprinted into the wing are centered over the fuselage (Figure 8).
- Connect the Wing Bands to the posts on the fuselage and wrap them across the wing in an "X" pattern and then a "II" pattern as shown (Figure 9).



Figure 7 - Wingtips point up and back



Figure 8 - Wing is centered



Figure 9 - Wing Band placement

## Installing the Flight Pack into the Fuselage

- Gently lift and open the battery hatch on the front of the Cosmic Flyer fuselage.
- Leave all foam pieces inside of the fuselage to ensure proper placement of the flight pack.
- Place battery into fuselage with the wide section of the battery toward the front as shown. (Figure 10)
- Attach the battery connector to the connector inside the fuselage, gently close the hatch and secure w/ rubber band around fuselage



Figure 10 - Battery Placement



Figure 11 - Trim Tabs

## Pre-flight Test

- Begin by centering the trim tabs on your transmitter (Figure 11).
- Turn your transmitter on first, then install a charged battery into your plane.
- Hold your plane in one hand, with your fingers and loose objects away from the propeller.

- Move the right control stick of your transmitter all the way to the right.
  - a. The vertical part of the tail should move to the right.
  - b. Now move the right control stick all the way to the left. The opposite function should occur.
- Now press the Motor Start Button on the side of the fuselage. The motor should not start until this safety switch is pushed. Now push the left control stick forward. The propeller should now spin rapidly and stop when the control stick is back in its neutral state.

**Caution:** Keep hands, clothing and loose objects away from the propeller!



Control Stick Left



Control Stick Right

- Always fly your airplane in a wide open area, free from wires, trees and other obstructions. For your first flight, pick a day with little or no wind. Never fly in heavy winds or rainy weather.
- Fully extend your antenna and turn the transmitter on. Then install the flight pack. Make sure both lights on your transmitter are lit. **Note:** If the green light ever goes dark, your transmitter batteries are low. You should land your plane and change them right away.
- Make sure the transmitter antenna is fully extended for maximum radio link. Attach the Wind Indicator Ribbon to the end of your transmitter antenna to determine the direction of the wind. Always launch your airplane into the wind.
- Hold your plane in one hand, keeping clear of the propeller. Next press the red Start Button on the side of the fuselage and push the left control stick completely forward. Gently toss the plane into the wind, level with the horizon. If the plane is tilted upward or downward, your launch may not be successful.



- Allow the plane to climb to a safe altitude (50-75 feet) before attempting turns. You do not want the airplane to get too far away from you, so once it is at a safe altitude, move the right control stick gently in the direction you wish to turn. Once it has turned toward the direction you want, release the right control stick.
- If you begin to gain too much altitude, release the left control stick and let the Cosmic Flyer glide to a more comfortable level. When the plane gets too low to the ground, add motor thrust by pushing the left control stick forward.

**Important Tip!** When the airplane is coming toward you, the controls are reversed (moving the stick left will make the plane turn to your right). This is an important characteristic to get used to. Try to imagine you are actually sitting in the airplane's cockpit. This will help you.

- Do not panic if you see the plane begin to spin or make erratic movement. Simply release both control sticks and the Cosmic Flyer's Self-Righting Mechanism will kick in. Within a few seconds, you will return to a steady glide.



## Landing Your Cosmic Flyer

When piloted properly, your Cosmic Flyer should glide gracefully in for a landing and slide gently to a stop.

- Always try to land into the wind, keeping the wingtips as level as possible.
- Set up for a landing by making a gentle, shallow turn to face the airplane into the wind.
- When the airplane is level and facing into the wind, release both control sticks and the plane will descend to the ground.
- If slight corrections are needed as the airplane makes its way to the ground, move the right control stick in the appropriate direction, but only for a moment, so as to keep the airplane descending on a straight heading. Over-steering will put the airplane into another turn, which could make it crash if you are too close to the ground. Keep the Cosmic Flyer flying straight until it lands safely.

### Helpful Hints

- Flight time is about 10-15 minutes. When the power on the plane is low, the motor will shut off, however, the servos will still work, so you can land the plane. Land the plane as soon as possible when the power runs out.
- Bring several extra batteries with you for longer flying time.
- 8 AA alkaline or NiMH batteries are recommended.
- Check the direction and speed of the wind before you begin to fly. The Wind Indicator Ribbon will point in the direction the wind is blowing.
- If the plane drifts right while flying, move the rudder trim tab (located under the right control stick) to the left to correct the problem. If the plane drifts left, move the rudder trim tab to the right.
- Check the power light on the transmitter often during a flight. If the green light becomes dark or goes out, land the plane as soon as possible to avoid losing control. Then change the batteries in the transmitter.
- Always stay far away from trees, buildings and elevated land. Unexpected air currents can quickly alter your Cosmic Flyer's course and possibly lead to an accident.
- Always keep the plane in front of you. Never fly your Cosmic Flyer directly overhead, as it is easy to lose your sense of direction.
- If the main wing on your Cosmic Flyer becomes damaged, simply apply clear packing tape to the affected area.

## Ordering Spare Parts

Spare, repair and replacement parts are readily available for your Cosmic Flyer. We recommend that you visit your local hobby dealer first. If the parts are unavailable there, you can contact Megatech. Use the list below as a guide.

### Spare Parts List

Part Number    Descriptions

993201    Main Wing

993202    T-Tail Assembly

993203    Landing Gear

3902    6V Rechargeable NiMH Battery Pack

3815    110V Charger

SV-024    Rubber Wing Bands

735002    Transmitter Battery Cover

SV-012    Propellers (2)

3812    Peak Detection AC/DC 4-8 Cell Charger

Contact us at:

### **Megatech Parts Department**

8300 Tonnelle Avenue

North Bergen, NJ

Telephone: (201) 662-2800

Fax: (201) 662-1450

E-mail: [info@megatech.com](mailto:info@megatech.com)

## Limited Warranty

Megatech International guarantees this item to be free from defects for a period of 90 days from date of purchase. If any component of this product fails to function properly due to defects in materials or manufacturing process during this 90 day period, the Manufacturers obligations are limited and manufacturer can choose to either repair or replace the item.

This warranty is void if the product in question has been altered or repaired by anyone other than Megatech International or an authorized agent.

Under no circumstances will Megatech International or any of its representatives be held liable for injury to persons or property damage resulting from assembly or use of the product. Megatech is not liable if any outside radio frequencies interfere with the product's frequency causing loss of control. Megatech International will not be held liable for any personal injury or property damage resulting from an out-of-control model caused by use or misuse of the product.

Megatech International expressly excludes any and all express warranties not specifically stated here and all implied warranties of merchantability and fitness for a particular purpose. There are no warranties which extend beyond the description of the warranties contained herein.

Contact the Megatech International Service department before returning any item that is defective according to the limitations listed above. Please be sure to pack the returned item(s) carefully. The customer must return the product along with proof of purchase, a letter stating the problem, the customer's address and telephone number. At this point in time we will either repair the defective part or replace it and return it to the customer. Return shipping and handling in the 48 contiguous states is \$12.99. Shipping outside of the 48 states will be quoted by location.

This warranty does not cover any damage caused by use, misuse, alteration, accident, or neglect, nor does it cover normal wear and tear of the product. Product returned to us which falls under this category will be submitted to our service department for repair. We reserve the right to charge any service and parts fees incurred when repairing the item.

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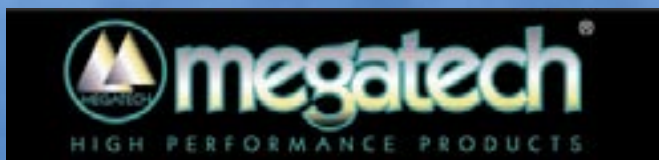
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