Troubleshooting and Repairs

Before your first flight, YOU MUST READ ALL OF THE DIRECTIONS! Pg.4

Troubleshooting

Problem	Cause	Solution
Electric Motor does not run or power is low.	• Power switch is set to "Off".	• Turn both the transmitter and the plane to the "On" position.
	• Battery in the airplane not charged.	• Fully charge the airplane.
	• Batteries are installed with the wrong polarity.	• Make sure that the batteries are inserted properly.
	• Batteries are drained.	• Replace the batteries in the charger and/or transmitter.
	• Debris stuck behind propeller.	• Carefully remove any obstructions.
	• A crash has damaged internal components.	• See Crash Warranty pg. 4.
Plane won't charge.	• Charger batteries are drained.	• Replace batteries in charger.
	• Plane is already charged.	• Z-Plane is ready to fly.

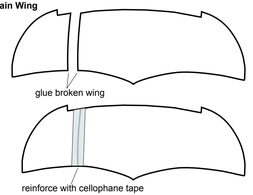
Problem	Cause	Solution
Airplane is difficult to control.	• Others operating on same frequency.	• Move to a new location or wait until clear of others.
	• There is too much wind.	• Fly when there is no wind.
	• Airplane battery is depleted.	• Recharge the Airplane.
	• Controller batteries depleted.	• Replace batteries with new ones
	• Transmitter antenna not extended.	• Fully extend the transmitter antenna.
Airplane is difficult to control on the ground.	• Gear is out of alignment.	• Make sure that the gear is even on both sides and secure.
	• Tail skid is not straight.	• Make sure the Tail Skid is straight, secure and not totally worn away
Short flying time	• Plane batteries not fully charged.	• Completely recharge batteries.
	• Plane batteries damaged from over charging.	• Replace airplane. (see Crash Warranty below)

Crashing and Repairs

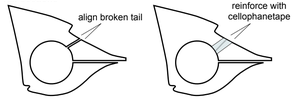
Any landing that doesn't damage the plane is a good one. This airplane is durable and lightweight and should withstand rough landings. However, you may damage it while learning to fly.

The foam materials used to build the airplane can be repaired easily at home. You can be flying again quickly by repairing the model with household tape and glue. Clear packing tape works best for most repairs; however, you may need to glue pieces back together. Use household white glue to make repairs.

Main Wing



Tail Sections



IMPORTANT NOTE: It is extremely important that you do not use solvents or Cyanoacrylate glue, as they will damage the foam. If any of these chemicals comes into contact with the foam, it will turn into mush. Use only epoxy or white glue to repair damaged parts.

STOP! **Please Do Not Return this product to the retailer for Questions or Concerns with this product. Please Call Our Technical Support at (866) 286-9711 or email technicalsupport@atomictoys.com**

To contact customer service, send email to customerservice@atomictoys.com, Or, call Toll Free (866) 286-9711

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Modifications not authorized by the manufacturer may void users authority to operate this device.

Do not mix old and new batteries
Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium) batteries.

Conforms to ky standards ASTM F963 and EN-71.

Actual product may differ from images depicted, We reserve the right to modify product at any time for safety and general improvements in quality and value.

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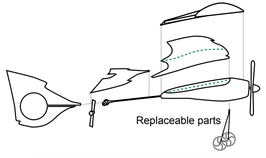
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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.

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES,
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:
(1) THIS DEVICE MUST NOT CAUSE HARMFUL INTERFERENCE, AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED,
INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

TESTED TO COMPLY WITH FCC STANDARDS FOR HOME OR OFFICE USE

Replacement Parts

Listed below are the replaceable parts on the plane with their part numbers. Visit your local store that carries the Z-Plane, or call our Customer Service Department to order.



Parts List	
Main Fuselage w/ internal parts	1
Main Wing w/ Rubberbands	2
Tail Section (Horiz. and Vert. stabilizers)	3
Rear Propeller	5
Canopy	6
Landing Gear	7
Controller Antenna	8

Limited Warranty

Atomic Toys, LLC warrants this product to be free from original manufacturing defects for 90 days from purchase by the consumer. Atomic Toys makes no express or implied claims regarding the product once it has been assembled and used. This warranty does not cover damage from intentional misuse, abuse, fire, flood, or other damage unrelated to the use of the product for the purpose of which such products are normally intended. This warranty does not cover damage from products used with this item that are not approved for use with this product. The purchaser of this product acknowledges and understands that they alone assume all risk and liability for personal or property damage and/or injury resulting from the buyer's use of the product. Under no circumstances shall Atomic Toys' limits of liability from the use of this product exceed the original purchaser's cost of the item. The express warranties contained above are in lieu of all other warranties, expressed or implied, including but not limited to the warranty of merchantability, and/or fitness for a particular purpose, nor shall Atomic Toys, its divisions or assigns be liable for any incidental or consequential damages, costs or expenses incurred by the purchaser of this product.
This warranty gives you specific legal rights, but other rights that vary from state to state may be in effect for you.
CRASH DAMAGE WILL NOT BE COVERED UNDER WARRANTY.

Atomic Toys, LLC - 7886 Convoy Court - San Diego, CA 92111 - (866) 286-9711

Z-Planes Crash Warranty

If your Z-Plane is badly damaged within 1 year from the date of purchase, for whatever reason, Atomic Toys will replace the entire airplane (no questions asked) for a fee of $15.00 (shipping included for Continental US orders. For international orders, actual shipping charges will apply). Simply return the damaged model to Atomic Toys with its original receipt, check or money order for the replacement fee, and we'll send you a brand new Z-Plane.

Atomic Toys Customer Service
attn: Z-Plane Crash Warranty
7886 Convoy Ct
San Diego, CA 92111

Attention: DO NOT RETURN THE TRANSMITTER, CHARGER OR BATTERIES. It will only add to the cost of the return shipping. The new model you will receive will work with your current controller.

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Safety and General Information

Before your first flight, YOU MUST READ ALL OF THE DIRECTIONS! Pg.1

Thank you for purchasing this exciting product. For best results, please read these instructions carefully.

Airplane Storage

- Store the airplane in its original package.
- The protective inserts supplied with the package will help to prevent damage to the wings, motor, propeller and tail sections.
- Failure to keep airplane safe can result in warped, cracked or broken wings, damaged propellers, or most critically, damage to the tail section.

General Warning

- Do not fly this airplane if another airplane is on the same frequency. The frequency number is printed on the box and on the bottom of the airplane.
- Never fly this airplane at night or in the street.
- Always fly in an open area free of obstructions.
- Do not fly near people or animals, streets, houses, trees, or power lines.
- Do not fly in adverse weather conditions like rain or snow.
- When flying, make sure that spectators are behind you.
- Always be conscious of spinning propellers. Be careful not to allow clothing or hair to be drawn into the propellers.
- It is very important to always use fresh and/or fully charged batteries.
- Never allow the batteries to run low, or the airplane could become out of control.
- Do not attempt to dismantle the airplane's components, especially the transmitter or battery.
- Do not allow any components to get wet, because damage to the electrical components can occur.
- Complete a Range Check of your radio transmitter before each new day of flying or prior to the first flight of a repaired model.
- Do not use solvents to clean the airplane. Solvents will damage the foam.
- Use a dry cloth to clean dirt from the outside of the model.

Battery Warnings

- The plane contains a lithium-ion rechargeable battery.
- The rechargeable battery cannot be replaced.
- If fluid leaks from the plane, avoid contact with the skin and eyes and properly dispose of the plane.
- Do not short circuit the terminals of the charger.
- Do not charge the battery without ventilation.
- If the battery makes a "popping" noise or leaks liquid, DISCONNECT CHARGER IMMEDIATELY and dispose of plane.
- Never charge the plane longer than 30 minutes, as damage to the battery may occur.
- Never leave the plane unattended while charging.
- To prevent the plane from overheating during the charging process, allow the plane to completely cool before charging.
- Only use the charger supplied to charge the battery.
- Do not dispose of airplane by incineration.

Radio System Warnings

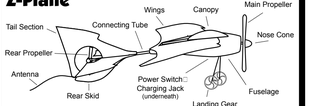
- Always turn on the transmitter before turning on the airplane.
- Always turn off the airplane before turning off the transmitter.
- When flying, make sure that the antenna is fully extended.
- Never attempt to disassemble any of the radio components.
- Do not cut or shorten the length of the transmitter or receiver antenna. This will significantly effect the radio system's range.

Propeller Safety

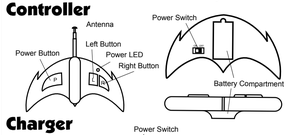
- Keep your face, fingers, clothing and all other objects away from the propeller at all times.
- Before each flight, ensure that the propeller is securely attached to the plane.
- After each flight, inspect the propeller for damage.
- Discard any propeller that is niched, chipped, cracked or broken.
- Only use the propeller that is supplied with this airplane.
- Do not alter, modify or customize the propeller.

Package contains:

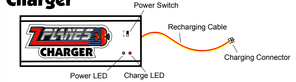
Z-Plane



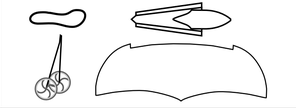
Controller



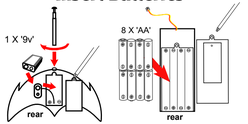
Charger



Landing Gear, Elastic Bands, Canopy & 2nd Wing

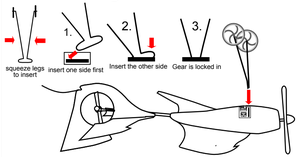


Attach Antenna and Insert Batteries



Insert antenna into controller and turn clockwise to tighten. Use a screwdriver to open the battery covers. Insert 1 '9v' into the controller and 8 'AA' into the charger. Then, replace the covers and locking screws.

Install Landing Gear



Insert the landing gear (with legs swept back) into the slot at the front of the plane's control panel. Then carefully spread landing gear apart to secure.

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Pre-Flight (Before Each Flight)

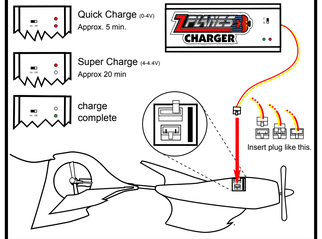
Before your first flight, YOU MUST READ ALL OF THE DIRECTIONS! Pg.2

Charge the Airplane

Quick charge time is approx 5 min (less if charge is left).
Super Charge time is approx 20 min (less if charge is left).

Turn on the charger and the green light will glow. Make sure that the plane switch is set to Charge (toward to propeller). Then insert the charging connector into the jack on the bottom of the plane as shown. Both red lights on the charger will glow. This means you're Quick Charging. After the battery has reached 4.0V the charger will go into Super Charge mode, one red light glowing. When the battery is fully charged (4.4V), the red light will turn off and the green light will glow again.

NEVER LEAVE THE CHARGING AIRPLANE UNATTENDED.



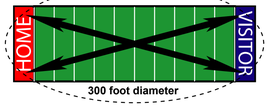
Pre-Flight Checklist

Make sure that all of these items are completed and check before takeoff:

☐ 1) Batteries Full
☐ 2) Plane Fully Charged
☐ 3) Plane Components Aligned
☐ 4) Radio Check
☐ 5) Wind Check
☐ 6) Area Clear

Flight Area

Never fly with wind over 5 mph!
Find an area at least the size of a football field.
SOFT GRASSY AREAS ARE BEST FOR BEGINNERS!
Never fly near obstables.



300 foot diameter

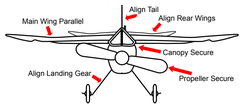
Radio Check

Test the transmitter before each new day of flight.
First test the main propeller, then the rear propeller in both directions. Then, place the airplane on the ground and move away at least 50 feet. Test that the airplane is receiving a good signal by taxiing a short distance. The plane's movement should be smooth and not stuttering.



BEFORE EACH FLIGHT!!!

Ensure that the main wing is centered over the fuselage.
The artwork on top of the wing may not exactly line up in the middle.

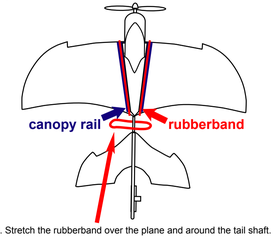


Wing Assembly

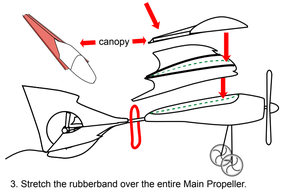
The Main Wing is designed to give way during impact, thereby reducing damage to the plane. The wing rubberbands are critical to the airplane's durability.

The Main Wing should be secure. The following detail shows how to install the Main Wing, if it becomes dislodged or is removed for repair or replacement.

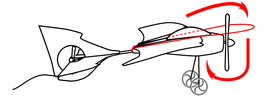
Secure the wing to the fuselage by fitting the rubberband over the rails on the canopy. Make sure that the rubberband tension is equal on both sides of the wing.



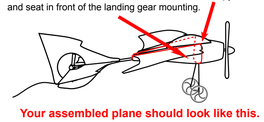
1. Stretch the rubberband over the plane and around the tail shaft.
2. Center the wing and canopy over the top of the fuselage as shown.



3. Stretch the rubberband over the entire Main Propeller.



4. Seat the rubberband in the channels on the canopy and seat in front of the landing gear mounting.



Your assembled plane should look like this.

Flight Manual

Before your first flight, YOU MUST READ ALL OF THE DIRECTIONS! Pg.3

The revolutionary Z-Plane provides the excitement of flight in an easy to use format. We have tested its durability and it has surpassed our expectations during normal use and test crashes. However, the Z-Plane is a hi-tech precision toy that should be handled with care.

The nature of this product is such that you may eventually crash the plane, causing potential damage to the wings, tail or propeller. Any damage caused by crashing the plane during normal flight should be easily repaired using the techniques described in the "Repairs" section on page 4 of this instruction manual. The Z-Plane is unlikely to sustain excessive damage during normal use. (Please see the Crash Warranty on page 4 for more information).

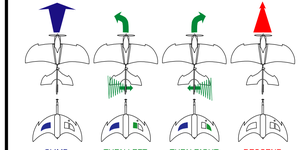
Hand Launch (Beginner)

Make sure that there is a clear takeoff area.
Hold the airplane facing into the wind. While standing behind the airplane, press the Power button and release the plane into the wind. DO NOT THROW HARD. Gently release the airplane while moving your arm in a forward motion. Use the directional control to maintain a straight course until you have achieved a reasonable maneuvering altitude (approximately 30-50 ft). THE PLANE SHOULD FLY OUT OF YOUR HAND ON ITS OWN POWER.



In Flight

Hold the Power Button to CLIMB.
Release the Power Button to swoop, dive or descend.
Use the Left ("L") and Right ("R") directional controls to turn the plane, while continuing to depress the Power Button.



Turning

Use short "bursts" when you press the directional control. They have a gradual effect on direction, so you will oversteer if you hold the button to long. Holding the power button too long will cause the plane to stall.

Turning Left: When the Left Button is pressed, the rear rotor on the airplane spins clockwise causing the airplane to turn left.

Turning Right: When the Right Button is pressed, the rear rotor on the airplane spins counter-clockwise causing the the airplane to turn right.

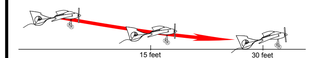
When you have reach your desired direction, press the opposite direction to straighten out, then, continue moving forward.

IMPORTANT NOTE: When the plane is coming toward you the controls will seem reversed. To help you compensate for this, simply imagine that you are inside the cockpit of the plane.

Also, it may help to push the directional button of the wing that it tipping lower than the other.

Landing

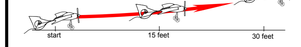
When you are ready to land, or if the airplane is running low on power, make a short turn (into the wind, if possible), line up the airplane with the landing area and use bursts of the Power button to keep the airplane parallel with the ground. Use very slight directional control while landing, to maintain a straight line (do NOT overcontrol). When you are close to the ground, release the Power Button. Stand clear of the airplane until it comes to a complete stop.



Ground Takeoff (Advanced Pilots Only)

For more expericnce pilots, the airplane may be launched from the ground!
The airplane needs to have hard packed ground to launch.

Make sure that there is a clear takeoff area.
Place the airplane on the ground facing into the wind, (use the flag on the controller antenna)
Stand behind the airplane and press the Power Button.
The Main Propeller will spin and the airplane should start to move forward quickly. After about 15 feet the airplane should start to lift off of the ground. Maintain a straight line by holding the Power Button to climb to a reasonable maneuvering altitude (approximately 30-50 feet).
If the airplane start to stall while climbing, quickly release the Power button to swoop and gain some speed. Then keep the Power button depressed to gain altitude. Make sure you have a decent amount of ground clearance.

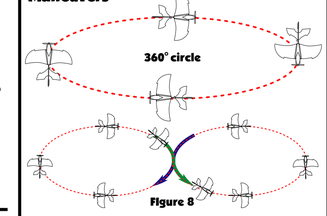


Tips and Tricks

Beginners should always fly when there is no wind.
Before Take-Off, make sure the wings and tail are parallel and aligned with the fuselage.
If the plane is turning either right or left, use the clear tabs on the tail section to adjust the flight characteristics.
The Z-plane flies best when the rechargeables batteries are fully charged.

Do not run the motor if the propeller is caught up. It may cause the motor to overheat.

Maneuvers



When you have gained control of the airplane and are comfortable with the flight characteristics, you can try these and many other standard flight maneuvers.

Modifications not authorized by the manufacturer may void users authority to operate this device