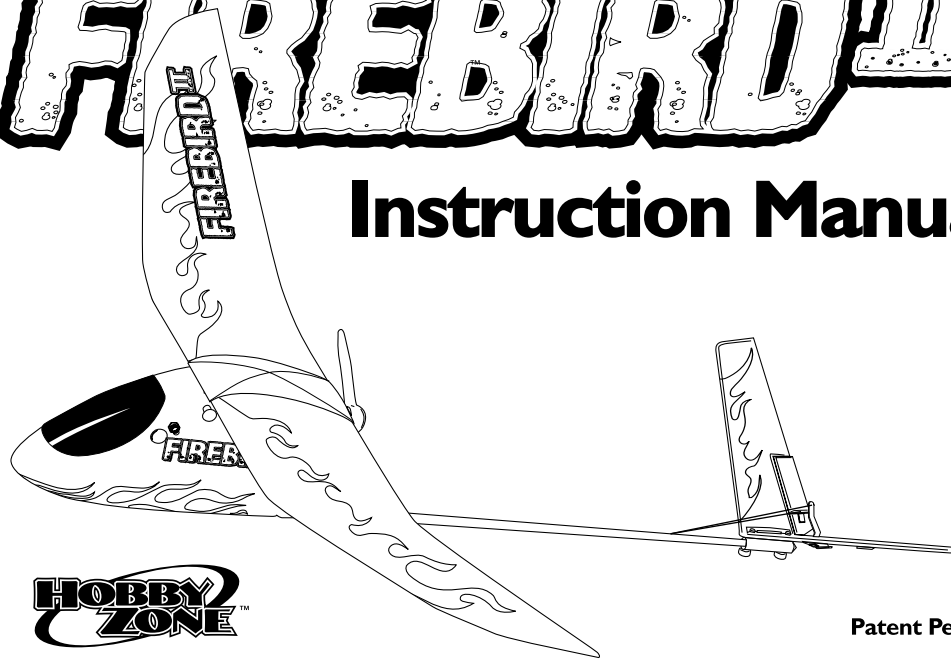


FIREBIRD II

Instruction Manual



**HOBBY
ZONE™**

Patent Pending

Welcome to the
HobbyZone™
world of fun!

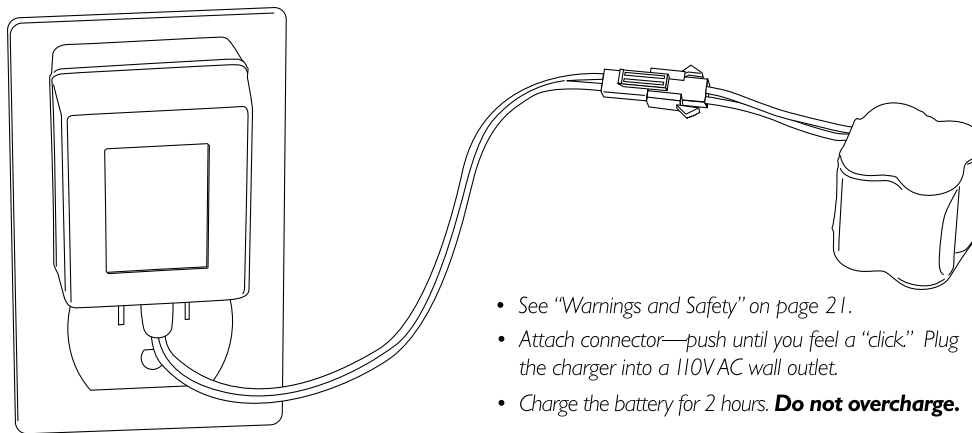
WHOA, THERE. READ THIS!

Congratulations! You have the easiest flying radio control airplane ever—the Firebird II™ from HobbyZone. Our mission at HobbyZone is to make sure you have success with your Firebird II—to have safe fun and learn a few things along the way.

You're going to be surprised how easy it is to fly a radio control airplane. There's one catch, though. You gotta' read and **follow the directions.**

Ready to get started? So are we. Let's go! First, watch the included instructional video to make assembly and flying of your Firebird II even easier.

STEP I. Charge Aircraft Battery



- See "Warnings and Safety" on page 21.
- Attach connector—push until you feel a "click." Plug the charger into a 110V AC wall outlet.
- Charge the battery for 2 hours. **Do not overcharge.**

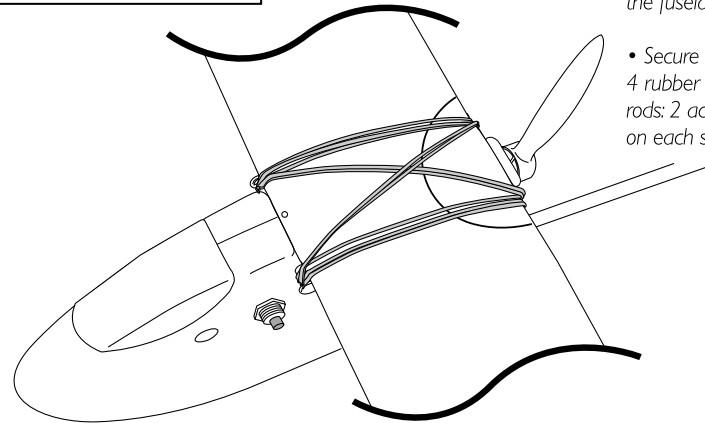
IMPORTANT

Charge the battery shortly before flying. If you wait more than 12 hours before flying, charge again for 30 minutes right before you fly.

STEP 2. Wing Mounting

Needed for STEP 2

Rubber Bands (x4)



IMPORTANT

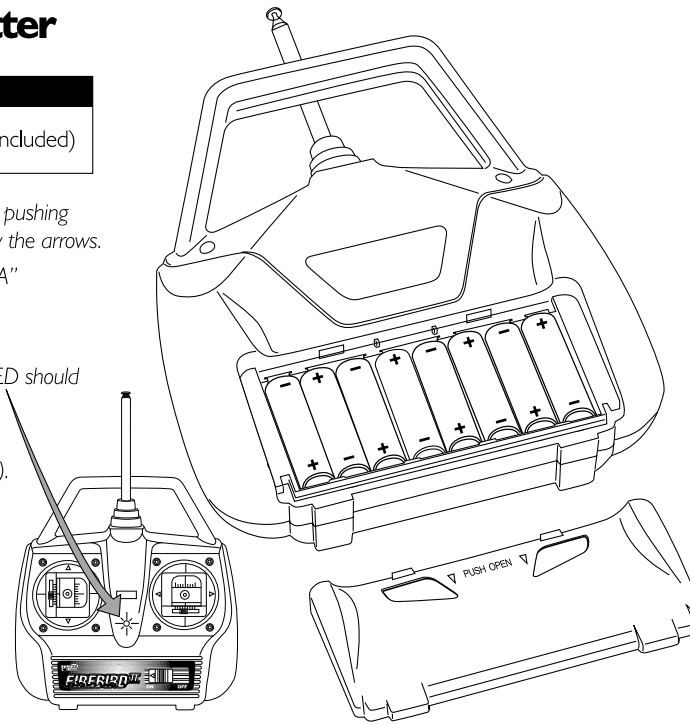
- Center wing **EXACTLY** on fuselage by aligning the dot on the wing with the fuselage seam.
- Secure wing in place by attaching 4 rubber bands to the hold-down rods: 2 across the middle and one on each side as shown.

STEP 3. Transmitter

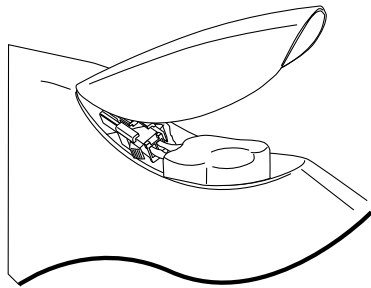
Needed for STEP 3

"AA" Alkaline Batteries (x8 - not included)

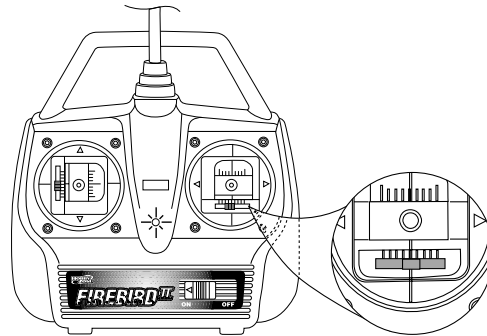
- Remove transmitter back cover by pushing down with thumbs, as indicated by the arrows.
- Install batteries. Use fresh 1.5V "AA" alkalines only.
- **Watch polarity.** Replace cover.
- To test, switch on transmitter—LED should glow brightly.
- Replace batteries when you hear low battery alarm (beeping sound).



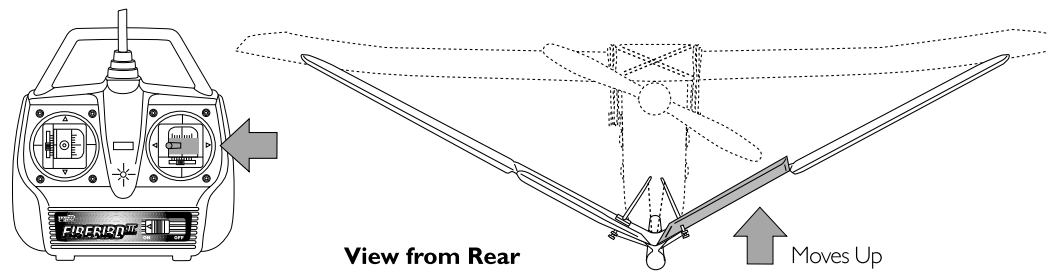
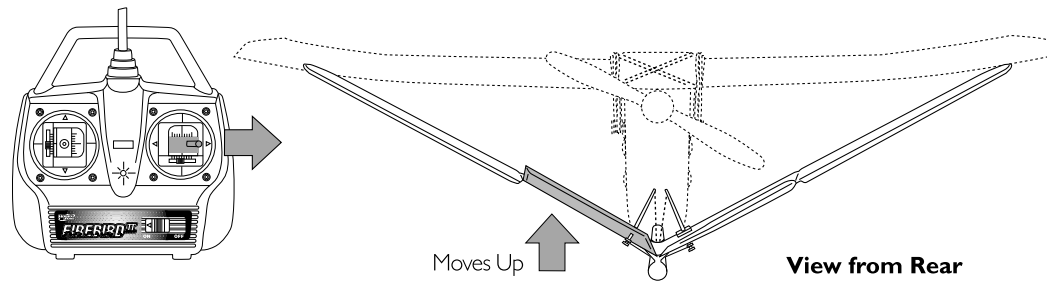
STEP 4. Tail Control Test



- Switch on transmitter—check LED.
- Install battery in fuselage slot and plug in connector.
- Move the right stick side to side. The tail flaps should move as shown on the following page.
- If each flap is not exactly level with the rest of the tail surface, when the right stick and trim lever are centered, adjust control lines so they are level (see page 16).

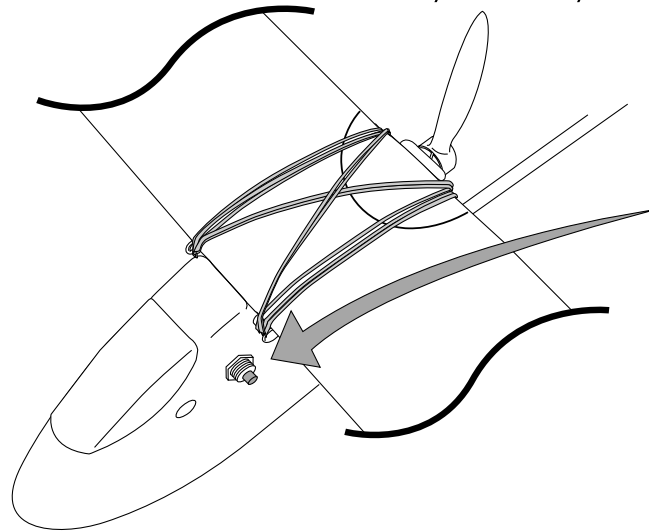


Note: The small lever under the tail stick is called a trim lever and is used to adjust the "neutral" point of your control stick. It's very important that this lever is centered when performing the control test.

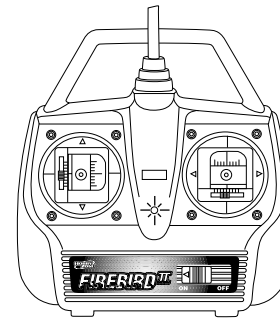


STEP 5. Motor Test

WATCH OUT! Be sure to keep everything clear of the propeller before starting the control test, in the event that you accidentally turn on the motor.



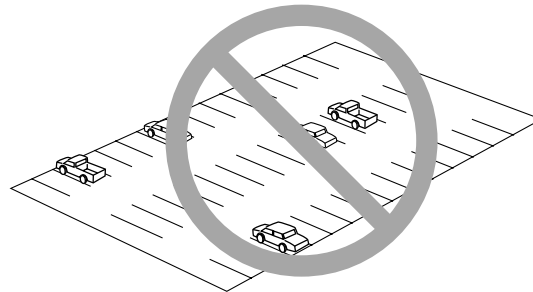
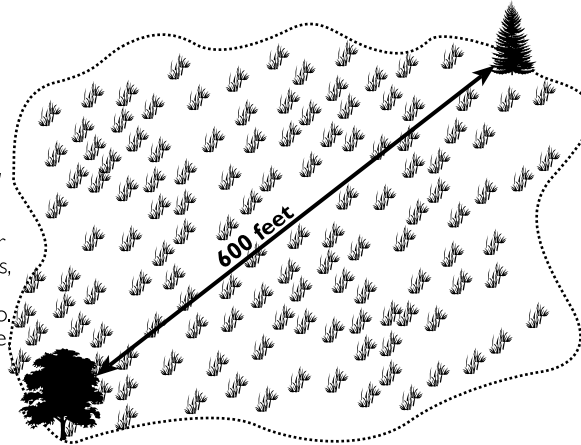
- Set throttle trim lever at center.
- Turn on the transmitter.
- Push the Start button on the side of the plane and move the transmitter's left stick up. The prop should spin at high speed. Adjust trim lever so the motor just barely turns off when stick is at neutral.
- When finished with motor test, be sure to disconnect the battery first, then turn off transmitter.



STEP 6. Choose a Field

- A **large**, open grass field with soft ground is best. Your Firebird II™ flies approximately 20 mph, so it covers ground fast. The bigger the field, the better!

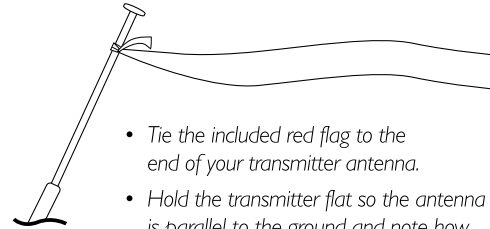
VERY IMPORTANT: Do **not** fly over or near people, buildings, power lines, highways, train tracks, vehicles, trees, water, pavement, gravel, any hard surface, or any object you don't want to crash into. Please take this warning seriously to keep people, property, and your Firebird II safe.
Crash damage is NOT covered by the warranty.



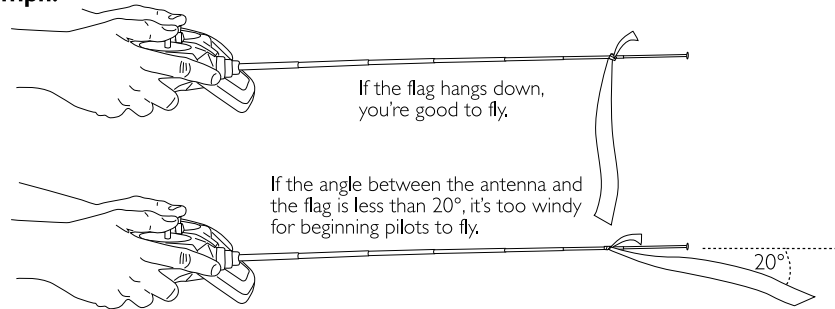
STEP 7. Choose a Day

You want to fly! If you wait until the day is right, you will have a successful flight. On your first flights, winds less than 5 mph winds are best. Do NOT fly when temperature is less than 32° F since the battery performance is reduced.

SUCCESS TIP: In our tests, new pilots attempting to fly in wind more than 7 mph had more difficulty than those who flew in less wind. **Be smart! Follow this tip and protect your Firebird II™ — you'll be glad you did. After you get plenty of experience, you'll be able to safely fly in wind up to 10–12 mph.**



- Tie the included red flag to the end of your transmitter antenna.
- Hold the transmitter flat so the antenna is parallel to the ground and note how much the flag moves in the wind.



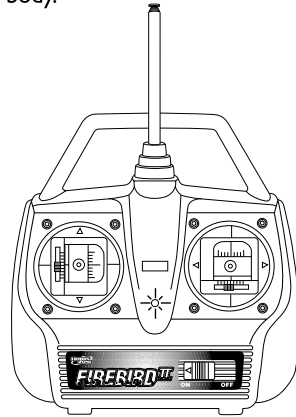
If the flag hangs down, you're good to fly.

If the angle between the antenna and the flag is less than 20°, it's too windy for beginning pilots to fly.

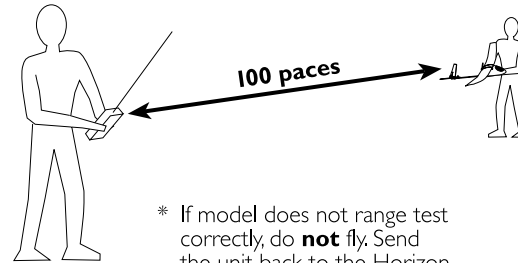
STEP 8. Range Test

You will need two people to do the range test: one to hold the transmitter and one to hold the airplane.

WATCH OUT! The person holding the airplane should hold it in such a way that the propeller does not come into contact with any part of their body.



- One person holds the transmitter; the other person walks 100 paces away with the airplane.
- Extend transmitter antenna and turn on transmitter.
- Plug in airplane battery and close hatch cover.
- Extend transmitter antenna completely.
- Push start button on side of fuselage.
- As the first person moves both of the transmitter controls at the same time, the other person watches to be sure the airplane's controls operate smoothly.*



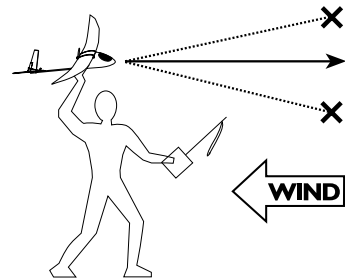
* If model does not range test correctly, do **not** fly. Send the unit back to the Horizon Service Center (see page 24).

STEP 9. Launch

IMPORTANT

Before launching, you'll need to determine the wind direction by watching which way the red transmitter ribbon is blowing.

WATCH OUT! Keep spinning propeller away from your hair, head, and hands or injury may occur.

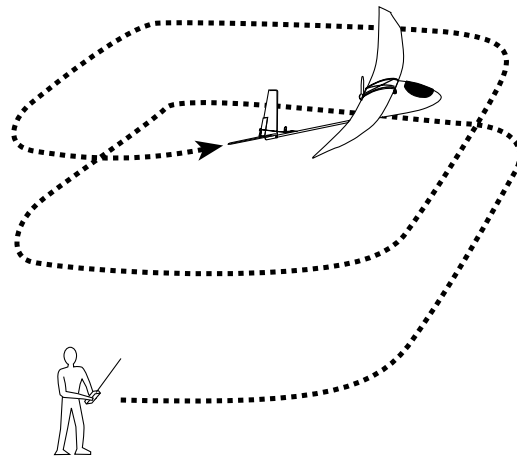


Hand Launch

On first flights, have a second person (adult recommended) launch the Firebird II™ while the pilot controls with the transmitter. Adult assistance is always recommended with pilots 12 years of age or younger.

- **Make sure** battery was charged shortly before your flight.
- While holding transmitter in one hand, push throttle stick to **full** on (up) and hold motor power on with thumb.
- Take a couple of steps and launch model **directly** into the wind. Keep wings level. Use medium force. Do **not** throw it up or down. Point it level to the ground when releasing. Think of it as a javelin that you are throwing 20 feet away.

STEP 10. Flying

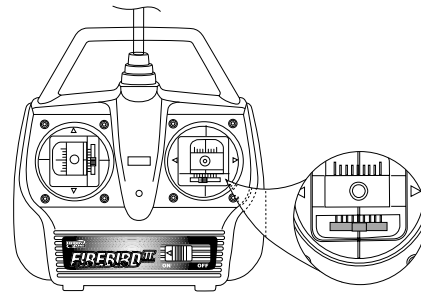


IMPORTANT: Don't hold the right stick full-over for more than 2 or 3 seconds. This can cause the model to spiral dive and crash.

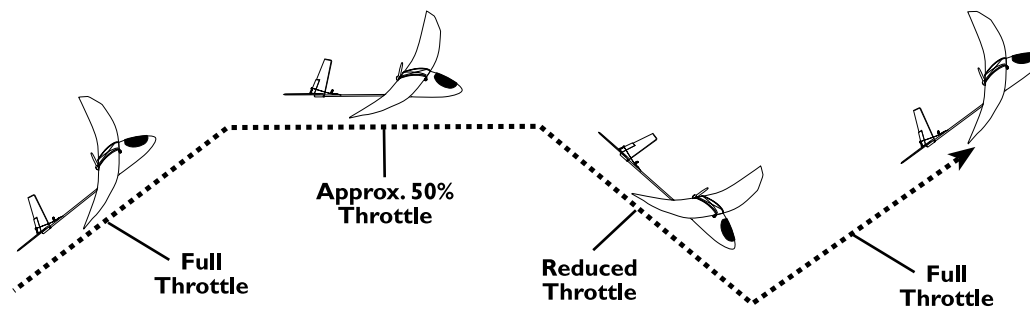
- After launching, model will begin climbing. Keep throttle full on. Make right and left adjustments of the right control stick to keep it flying straight into the wind. Don't attempt a turn until model reaches 50 feet of altitude. Control range is 1500 feet. Don't let the model fly too far away. Keep upwind, especially if wind is over 10 mph, or the wind may carry it away.

Turning—Hold the right stick in the direction you want the model to turn.

Trimming—The model should fly straight with the control stick at neutral. If the model always turns one direction or the other, you can correct this by using the trim control lever below the control stick to correct (see below). Turn to page 17 if additional adjustment is needed.



STEP II. Throttle Adjustment



WATCH OUT! If you're flying with the motor off or at a low speed, allow your Firebird II™ more area for turns. It will turn right and left much slower with the motor off or at low power.

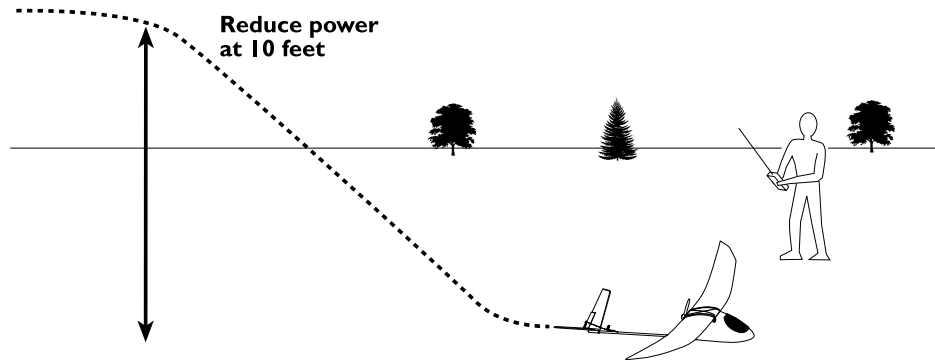
- *Climb to an altitude of 100 feet or more with full throttle.*
- *To achieve a level "cruising" altitude, reduce power by moving the throttle stick down to approximately 50% of full on.*
- *To reduce altitude, reduce throttle.*
- *To increase altitude, increase throttle.*

STEP 12. Landing

- When you notice that your Firebird II™ no longer climbs well under full power, your battery is getting low, and it's time to land.
- Line the model up, heading directly into the wind toward the desired landing spot. At 10 feet of altitude, gradually start reducing the throttle stick to turn off the motor. As you reduce the throttle, your Firebird II will glide in for a landing.

Expert Tip: As you get more experienced at flying, try adding a small "blip" of power just before touchdown. With some practice, you'll be able to land it right on target. **WARNING:** Do **not** attempt to catch the airplane or injury may result. Also, **be sure** to turn the motor off before you touch down or damage can occur to your wing and propeller.

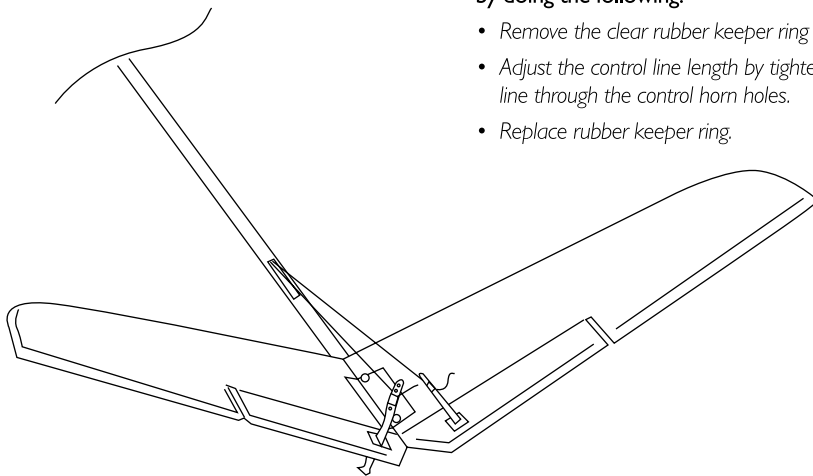
Auto Cut-off Feature: When your motor battery gets low enough, this feature will automatically shut off the motor and save enough battery to power the radio so you can land safely. If motor cuts off, prepare to land.



STEP 13. Making Adjustments - Leveling the tail control flaps

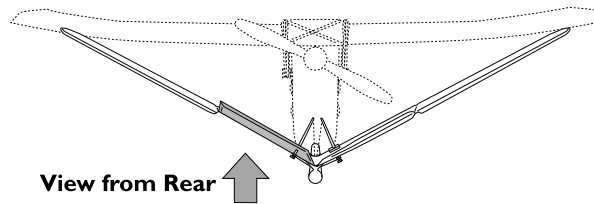
Before making your first flight, if tail control flaps are not level with rest of tail surface, adjust them so they are level by doing the following:

- Remove the clear rubber keeper ring from the control horn.
- Adjust the control line length by tightening or loosening the line through the control horn holes.
- Replace rubber keeper ring.



STEP 14. Making Adjustments -

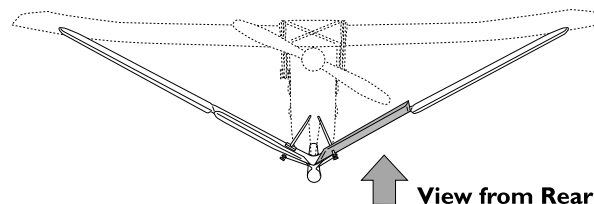
If your Firebird II™ keeps turning to the left or to the right



View from Rear

If your Firebird II keeps turning to the left and adjusting the trim control lever (page 13) does not correct enough to fly straight with the stick at neutral:

- Adjust control line so the left tail flap is $1/16''$ above the rest of the tail surface.
- Test fly.
- If it still flies to the left, repeat the above procedure, adding $1/16''$ each time until it flies straight.



View from Rear

If your Firebird II keeps turning to the right and adjusting the trim control lever (page 13) does not correct enough to fly straight with the stick at neutral:

- Adjust control line so the right tail flap is $1/16''$ above the rest of the tail surface.
- Test fly.
- If it still flies to the right, repeat the above procedure, adding $1/16''$ each time until it flies straight.

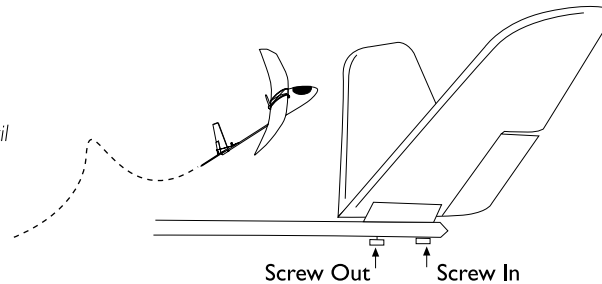
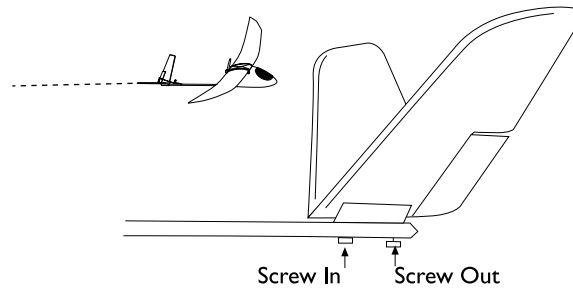
STEP 15. Adjusting the Climb Rate

If your Firebird II™ (with fully charged battery) does not climb fast enough with full throttle, you can adjust the climb rate by:

- Tightening the front tail screw in one full turn and loosening the rear tail screw one full turn.
- Test fly.
- Repeat above procedure if necessary until your Firebird II™ climbs adequately under full power.

If your Firebird II climbs too fast with full throttle by climbing at a steep angle, stalling, and keeps repeating climbing sharply and stallings, do the following:

- Loosen the front tail screw one full turn and tighten the rear screw one full turn.
- Test fly.
- Repeat the above procedure if necessary until your Firebird II climbs at a steady rate.



Try optional Speed Wing and Speed Battery for increased performance (only for experienced pilots)

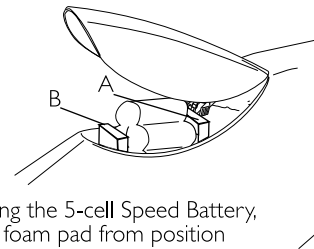
Red Speed Wing (HBZ1506)

- Once you have mastered flying your Firebird II™ with the standard yellow wing and you're ready for a mild increase in performance, purchase the red Speed Wing for a 10–15% increase in speed.



Speed Battery (HBZ1011)

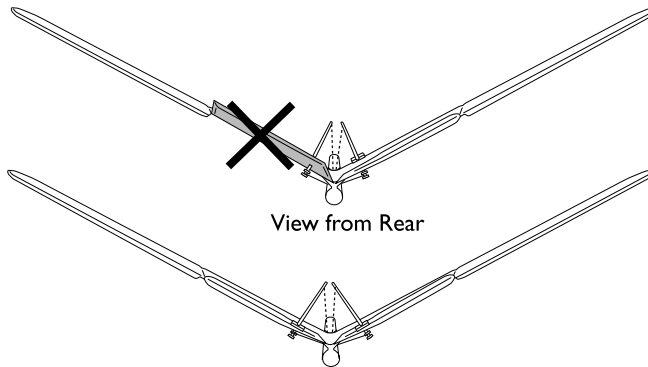
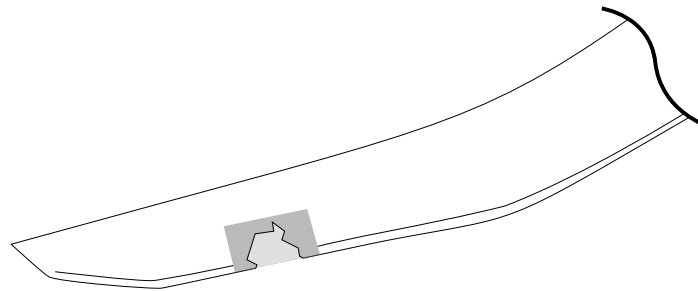
- Only for the VERY experienced Firebird II pilot, try the optional 5-cell 6-volt 600mAh NiMH Speed Battery. Be ready for a big 35% increase in speed. With this lower camber wing, the self-recovery flight characteristics are reduced, so please be prepared for this in advance.



When using the 5-cell Speed Battery, move the foam pad from position A to position B to adjust the center of gravity for better performance.

If a Crash Occurs

- If you happen to crash and part of the foam wing or tail breaks, it can be repaired using packing tape to cover missing pieces.
- If damage is severe, replacement parts are available. See page 25 of this manual.



View from Rear

View from Rear

**IMPORTANT:
Control Alignment**
Tail flaps must be level with
no slack in the control lines
or the plane will not fly well.
See pages 16 and 17 if
adjustment is necessary.

Warnings and Safety

1. Read and follow this manual completely, observing all instructions and safety directions. Otherwise, serious injury and damage can occur. Think **safety first**.
2. Keep propeller away from body parts, even when it isn't spinning, as you or someone else might turn it on by accident. Beware of hair becoming entangled in the propeller; especially during launching the Firebird II™ on a windy day or injury may occur.
3. Do **not** fly when it's too windy (as described in STEP 7) or you may lose control and crash, causing injury or damage. Never fly your Firebird II near people, vehicles, highways, train tracks, buildings, power lines, water, hard surfaces, or trees. Never allow anyone to attempt to catch the Firebird II while it's in flight or serious injury can result.
4. Adult supervision is recommended for ages 12 and under.
5. **Battery Charging:** Only use a battery charger intended for use with the Firebird II battery. Never leave charger unattended while charging. This will help prevent overcharging. While charging, place the battery on a heat-resistant surface. Do **not** lay it on carpet while charging. **Never** charge the battery with the included charger for more than 2 hours.
6. Never cut into the battery, charger, or airplane wires or serious injury can occur. Causing the battery to "short out" (crossing negative and positive bare wires) may cause a fire, serious injury, or damage.
7. When operating your Firebird II, **always** turn on the transmitter **before** you plug the battery into the Firebird. When you finish flying your Firebird, **always** unplug the battery **before** you turn off the transmitter.
8. Never fly on the same frequency as another flyer in your area. The frequency of your Firebird II is shown on stickers on the back of the transmitter and on the side of the fuselage.

To learn more about flying r/c model airplanes, location of the nearest AMA club, AMA safety code, frequency guidelines, and much more, we highly recommend that you contact:

Academy of Model Aeronautics
5161 East Memorial Drive
Munice, Indiana 47302
www.modelaircraft.org
Toll-Free: (800) 435-9262

Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Unit does not operate	<ol style="list-style-type: none"> 1. Transmitter "AA" batteries are depleted or installed incorrectly, indicated by a dim or unlit LED on transmitter or the low battery alarm 2. No electrical connection 3. Firebird battery not charged 4. Airplane receiver is not activated 5. Crash has damaged the radio inside the Firebird II™ 	<ol style="list-style-type: none"> 1. Check polarity installation or replace with fresh "AA" alkaline batteries 2. Push connectors together until they "click" 3. Charge battery for 3 hours 4. Don't forget to push the <i>Start</i> button on side of fuselage just before flight 5. Contact your retailer to replace the fuselage
Aircraft keeps turning in one direction	<ol style="list-style-type: none"> 1. Tail flaps need adjustment 2. Wing is not centered over the fuselage 3. Tail or wing is bent 	<ol style="list-style-type: none"> 1. Adjust stick trim (see page 13) or adjust tail flap position (see page 17) 2. Center the wing before each flight 3. Replace with new part
Aircraft is difficult to control	<ol style="list-style-type: none"> 1. Tail flaps aren't adjusted properly 2. Wing or tail is damaged 	<ol style="list-style-type: none"> 1. Adjust tail flaps (see pages 16, 17, and 18) 2. Repair or replace
Aircraft keeps pitching up steeply	<ol style="list-style-type: none"> 1. Tail incidence needs adjustment 2. Wind is too gusty or strong 	<ol style="list-style-type: none"> 1. Adjust tail screws (see page 18) 2. Postpone flying until wind is more calm
Aircraft won't climb	<ol style="list-style-type: none"> 1. Battery isn't fully charged 2. Tail needs adjustment 	<ol style="list-style-type: none"> 1. Charge battery just before flying 2. Adjust tail screws (see page 18)

Success Tips

- 1. A “must” for beginners:** Don't fly in winds over 7 mph!
- 2. Important:** Choose your flying field carefully— grass and soft ground with 600-foot diameter to fly is optimal and will lengthen the life of your Firebird II™.
- 3. Watch out!** Holding the right stick full-over for too long can cause the Firebird II to spiral dive and crash. At the very first sign of your Firebird II beginning to spiral or banking steeply, immediately release the stick or give the opposite control to level the wings.
- 4.** Purchase an extra battery pack for added fun at the flying field. A Firebird II 45 minute Field Charger can also be purchased at your local retailer to charge your packs from the cigarette lighter of a vehicle.
- 5.** If you're gliding with the motor off, allow your Firebird II more area for turns.
- 6.** Position yourself at your flying field to keep the sun at your back and out of your eyes. Wear sunglasses on bright days.
- 7.** Keep your Firebird II upwind, especially on windy days, to prevent your Firebird II from “flying away.” Remember the wind is normally stronger at higher altitudes than it is on the ground.
- 8.** Keep your plane out in front of you so you don't have to turn in circles as you fly. Try to avoid flying directly overhead.
- 8.** Before you use the 6-volt Speed Battery, make sure you have plenty of experience flying successfully with the standard 4.8-volt battery.

Warranty & Non-Warranty Replacement Parts

Firebird II replacement parts can be easily purchased at most hobby shops. For the location of a hobby shop nearest to you, please go to www.horizonhobby.com.

If you send your Firebird II to the Horizon Service Center:

1. Unplug the battery from the Firebird
2. Pack the complete Firebird II (all components) in the original box and put into a sturdy shipping carton for protection. Include complete name and address information inside the carton, as well as clearly writing it on the outer label/ return address area.

Warranty

Horizon Hobby, Inc. guarantees this airplane kit to be free of defects in material and workmanship at the date of purchase. This warranty does not cover any parts damaged by use, crashes, or modification.

Non-Warranty Parts Replacement

If you send your Firebird II to our service center for repair, should your parts replacement costs exceed \$50, you will be provided an estimate advising you of your options. Within your letter advise us of the payment method you prefer to use. The Horizon Service Center accepts VISA or Mastercard, or you can pay cash in advance with a cashier's check or money order. If you prefer to use a

credit card, please include your card number and expiration date.

Mail your Firebird to:

Horizon Service Center
ATTN: HobbyZone Dept.
4105 Fieldstone Road
Champaign, IL 61822
Phone: (217) 355-9511

Replacement Parts

Keep that Firebird II™ flying! Spare parts are available from your dealer or from Horizon Hobby direct (horizonhobby.com). Please check with your dealer first—by supporting your dealer, they'll be there when you need them.

PART #	ITEM	SUGGESTED RETAIL	PART #	ITEM	SUGGESTED RETAIL
HBZ1505	Yellow Standard Wing	\$9.99	HBZ1533	Transmitter: CH 3, 27.095	\$24.99
HBZ1506	Red Speed Wing	\$9.99	HBZ1534	Transmitter: CH 4, 27.145	\$24.99
HBZ1508	Tail	\$6.99	HBZ1535	Transmitter: CH 5, 27.195	\$24.99
HBZ1509	Yellow Wing Caps (4)	\$1.29	HBZ1536	Transmitter: CH 6, 27.255	\$24.99
HBZ1510	Rubberbands (5)	\$0.99	HBZ1007	Propeller	\$2.95
HBZ1511	Decal Sheet	\$2.99	HBZ1010	4.8V 600 mAh NiMH Battery	\$14.95
HBZ1512	Canopy Cover w/ Latch & Screw	\$1.99	HBZ1011	6V 600 mAh NiMH Battery	\$17.99
HBZ1514	Instructional Video	\$4.99	HBZ1015	2-hour Battery Wall Charger	\$9.95
HBZ1515	Instruction Manual	\$0.99	HBZ1020	45 Min. Field Charger for 4.8V 600mAh Battery	\$14.99
HBZ1521	Fuselage CH 1, 26.995	\$39.99	HBZ1022	45 Min. Field Charger for 6V 600mAh Battery	\$14.99
HBZ1522	Fuselage CH 2, 27.045	\$39.99	HBZ1047	1.5" Tail Boom Repair Section	\$0.50
HBZ1523	Fuselage CH 3, 27.095	\$39.99	HBZ1049	Wing Hold-Down Rods with Caps (2)	\$0.95
HBZ1524	Fuselage CH 4, 27.145	\$39.99	HBZ1058	Transmitter Antenna	\$4.95
HBZ1525	Fuselage CH 5, 27.195	\$39.99	HBZ1059	Red Transmitter Ribbon	\$0.75
HBZ1526	Fuselage CH 6, 27.255	\$39.99	HBZ1060	Transmitter Battery Cover	\$2.50
HBZ1531	Transmitter: CH 1, 26.995	\$24.99			
HBZ1532	Transmitter: CH 2, 27.045	\$24.99			

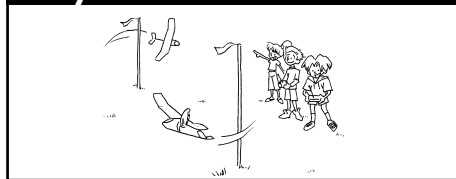
Fun with the Firebird II™

After just a little practice flying your Firebird II, you'll be ready to take on the added challenge of these "Firebird Frenzy" events shown below. Whether you participate in a competition you organized yourself for family members, or friends, or an official "Firebird Frenzy" organized by your local hobby shop or flying club, you'll find these easy-to-setup events a great way to increase your flying skills, while also having a blast. Try them today!

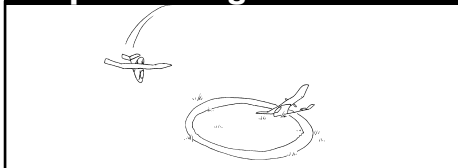
1. Limbo



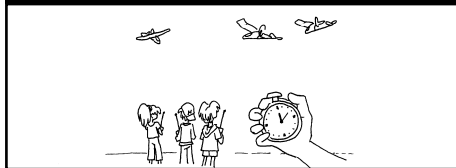
2. Pylon



4. Spot Landing



4. Duration



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