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radio control sports®
hobbyzonesports.com

HBZ2615



FIREBIRD COMMANDER 2

Instruction Manual



ACT
ANTI-CRASH
TECHNOLOGY

RTF
READY-TO-FLY

Z1



Welcome
to the World of

hobbyzone[®]
radio control sports

Congratulations! You have the world's first radio control airplane that can take you from a complete beginner, all the way to Air Combat—the Firebird Commander[®] 2 from HobbyZone[®]. The Commander 2 is equipped with revolutionary software: Anti-Crash Technology[™] (ACT). This exclusive technology helps to protect your aircraft from the crashes that are often caused by new pilots over-controlling the plane. Your Commander 2 has optical sensors that can see the horizon, and know how your plane should fly. If the sensors see your plane is entering a severe dive, the software will “take over” by reducing the throttle and making corrective directional control to help prevent the plane from crashing to the ground.

Once you're more experienced, you can enter Expert Mode, which allows you to have full control at all times for tighter turns and spirals, as well as other dramatic maneuvers. This extra maneuverability comes in handy when using X-port[™] accessories. This HobbyZone-exclusive port allows users to attach exciting accessories, including the Sonic Combat Module[™] (SCM) for air-to-air and air-to-ground fighting, the Aerial Drop Module[™] (ADM), which allows items such as parachutes and streamers to be dropped, and the Night Flight Module[™] (NFM), which allows users to successfully fly at night when using the white wing.

Our mission at HobbyZone is to make sure you have success when you fly your Firebird Commander 2, while ensuring you have safe fun and learn a few things along the way.

Crash damage is not covered under the warranty.

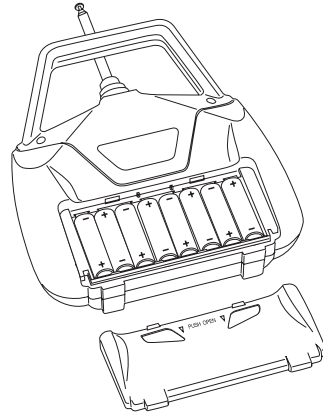
Be sure to read the warranty on page 28 and "Warnings and Safety" on page 25 before you proceed to Step 1.

Transmitter

Needed for Step 1

"AA" Heavy-Duty Batteries (x8 included)

1. Remove the transmitter back cover by pushing down with thumbs, as indicated by the arrows.
2. Install the batteries. Use fresh 1.5V "AA" batteries only.
3. Be sure to observe proper polarity when installing the batteries, and then replace the cover.
4. To test, switch on the transmitter. The LED should glow brightly.
5. Replace the batteries when you hear the low battery alarm (beeping sound).

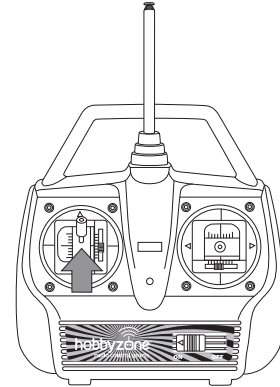


Motor Test and Battery Discharging

1. Turn on the transmitter.
2. Install the battery in the fuselage slot and plug it into the connector.
3. Move the transmitter's left stick all the way down and hold for one second. This will arm the motor.
4. Move the transmitter's left stick up. Since most batteries come partially charged, the prop should spin at high speed when you move the left stick up. (If the motor does not run, proceed to charging the battery.)
5. You need to discharge the battery before you recharge it. In order to fully discharge the battery, run the motor at high speed until it shuts off. If there is not enough charge in the battery to power the propeller, then proceed to Step 3.
6. When finished with the motor test, be sure to disconnect the battery first then turn off the transmitter.

Adult Supervision Required

WARNING: Keep everything clear of the propeller **AT ALL TIMES** and hold the plane securely. A moving propeller can cause severe injury.



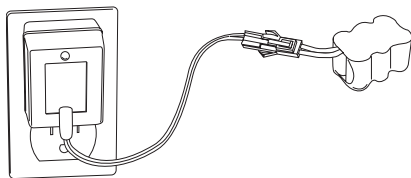
Charging the Aircraft Battery

Note: Never charge a hot battery or a battery that is already charged. Always discharge the battery before every charge. See Step 2 for instructions on discharging.

See "Warnings and Safety" on page 25.

1. The charger supplied with the Firebird Commander® 2 has a built-in timer. Plug the battery into the charger, and then plug the charger into the wall. The LED indicator should glow constantly. After about 3 hours, the LED will turn off. At this time, the battery is charged and ready to use.
2. To charge another battery, the charger must first be unplugged from both the wall and the battery to reset the timer.

You can purchase the variable rate DC peak charger (HBZ1026) and safely peak charge your battery pack in as little as 40 minutes. (see page 34)



IMPORTANT: Charge the battery shortly before flying. If you charge the battery more than 24 hours before flying, charge again for 30 minutes right before you fly. Stop charging immediately when the battery becomes warm, indicating it is fully charged.

Wing and Landing Gear Attachment

Mounting the Landing Gear

Insert the landing gear into the slot on the bottom of the fuselage and push it in until it snaps into place.

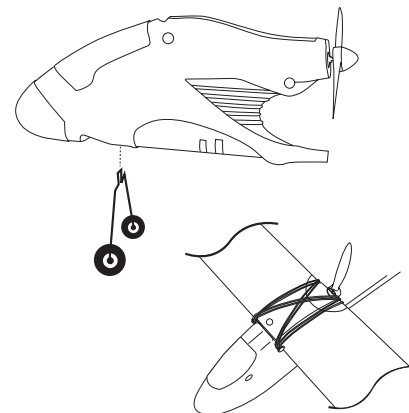
Note: When flying without X-port™ modules and landing on grass, it is not necessary to have the landing gear installed.

Attaching the Wing

1. Center the wing on the fuselage by aligning the center dot on the wing with the top seam on the fuselage, and by centering the half circle on the wing's trailing edge over the fuselage center.
2. Secure the wing in place by attaching two rubber bands across the middle and one on each side as shown. Locate the rubber bands on the peg hooks as close as possible to the sides of the fuselage.
3. Before each flight, make sure the front and trailing edges of the wing are exactly centered on the fuselage.

Needed for Step 4

Rubber Bands (x4)
Main Landing Gear

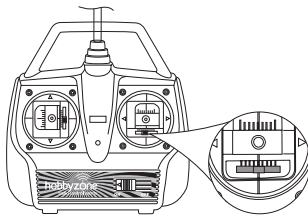
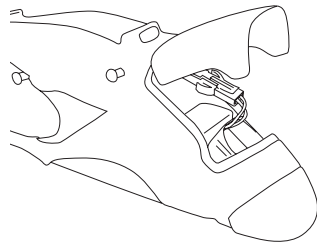


Tail Control Test

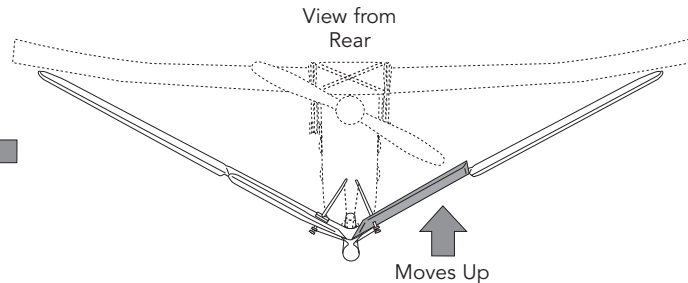
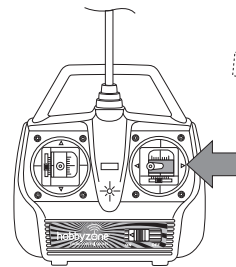
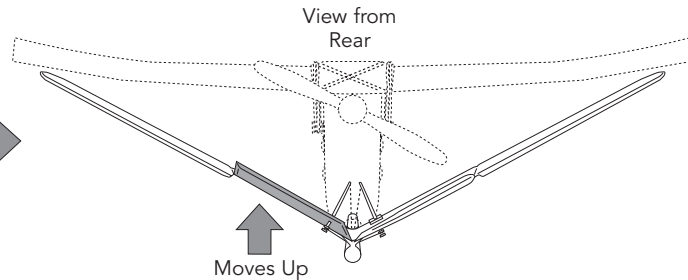
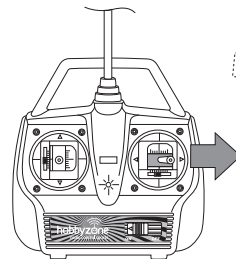
1. Switch on the transmitter. Check the LED. Do not touch the sticks for 2 seconds while the transmitter automatically calibrates the controls.
2. Install the battery in the fuselage slot and plug in the connector.
3. Move the right stick side to side. The flaps should move as shown on the following page. If each flap is not level with the rest of the tail surface when the right stick and trim lever are centered, adjust the control lines so they are level (see page 20).

Note: The small levers under or beside the control sticks are called trim levers and are used to adjust the "neutral" points of your control sticks. It's very important that these levers are centered when switching on the transmitter and performing the control test.

WARNING: Be sure to keep everything clear of the propeller when the tail control test is performed in the event that the motor is accidentally engaged.



Tail Control Test (continued)

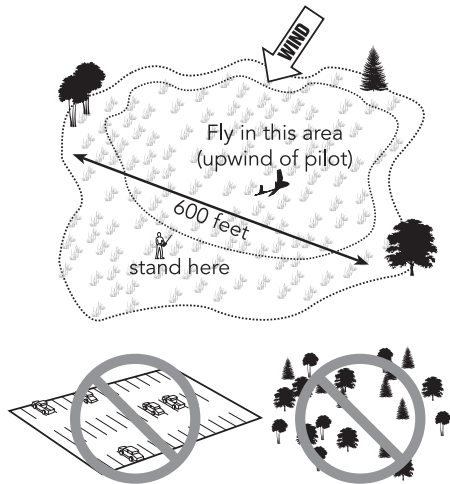


Choose a Large, Open Grass Field

A large, open grass field is required for safe, successful flight. Your Firebird Commander® 2 can fly at speeds in excess of 20 mph, so it covers ground fast. The bigger the field, the better!

It is absolutely essential to have a minimum of 600 feet of clear space in all directions from the pilot. If you ignore this direction, you will regret it.

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 Commander 2 safe. Crash damage is NOT covered by the warranty.

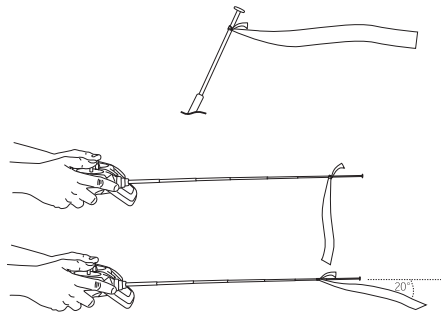


Choose a Calm Day

You want to fly! If you wait until the conditions are right, you will have successful flight. On your first flights, do not fly if the wind is more than 5 mph!

1. Tie the included red ribbon to the end of your transmitter antenna.
2. 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, the conditions are ones that will allow you to fly successfully. If the angle between the antenna and the ribbon is less than 20° , it's too windy for beginning pilots to fly.

SUCCESS TIP: Be smart! Follow this tip and protect your Firebird Commander® 2—you'll be glad you did. For beginners, flying in too much wind is by far the reason for the majority of crashes and/or lost planes.



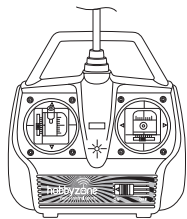
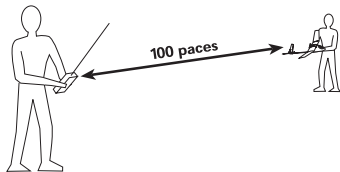
Range Test

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

1. One person holds the transmitter while the other person walks 100 paces away with the airplane.
2. Extend the transmitter antenna completely and turn on the transmitter.
3. Plug in the airplane battery and close the hatch cover.
4. Pull the throttle stick back to arm the motor.
5. As the first person moves both of the transmitter controls at the same time, the other person watches to be sure the airplane's motor and tail controls operate smoothly.
6. If an X-port™ accessory is attached, test it by pulling down on the left stick to check that it operates correctly.

WARNING: The person holding the airplane should hold it so that the propeller does not come near any part of their body.

If your Firebird Commander 2 does not range test correctly, do not fly it. Call Horizon Hobby Product Support Staff toll-free at 1-877-504-0233 for directions on how to proceed.

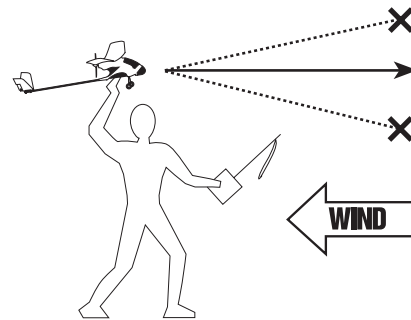


Hand Launch

IMPORTANT: Before launching, determine the wind direction by watching which way the red transmitter ribbon is blowing.

1. During your first few flights, have a second person (adult recommended) launch the Firebird Commander® 2 while the pilot controls the plane with the transmitter. Adult assistance is always recommended with pilots 12 years of age or younger.
2. Make sure the battery is fully charged.
3. While holding the transmitter in one hand, push the throttle (left stick) to full on (up) with thumb.
4. Take a couple of steps and launch the model directly into the wind. Keep the wings level and use medium force. Do not throw it up or down. Point it level with the ground when releasing. Think of it as a javelin that you are throwing 20 feet away.

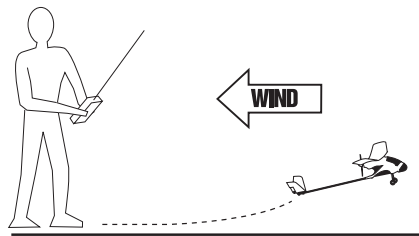
WARNING: Keep the spinning propeller away from your hair, head, and hands or injury may occur.



Runway Takeoff (ROG)

Not recommended for inexperienced pilots.

1. Make sure your landing gear is properly installed and is securely in the slot on the fuselage before you attempt takeoff.
2. Stand behind the Firebird Commander® 2 and point it directly into the wind on smooth asphalt or concrete.
3. Apply full power and adjust the right control stick as necessary to keep the Firebird Commander 2 headed directly into the wind.
4. If the battery is fully charged, the Firebird Commander 2 should lift off the ground in approximately 25 feet.



Flying

Important: Be careful when holding the right stick full over right or left for extended amounts of time. In some cases, this can cause the model to spiral dive, and if it does not have sufficient altitude, it could crash. If you see the Commander® 2 beginning to enter a spiral, release the right stick.

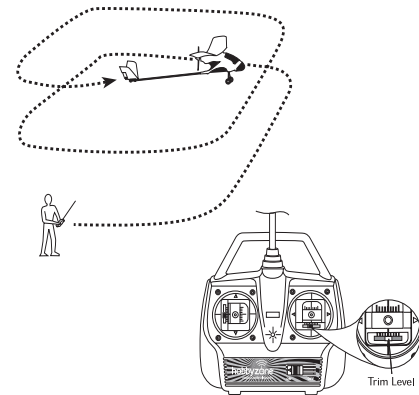
1. After launching, the model will begin climbing. Keep the throttle full on.
2. Make right and left adjustments of the right control stick to keep it flying straight into the wind. Don't attempt a turn until model reaches 50 feet of altitude.
3. Control range is 2500 feet. Don't let the model fly too far away. Keep upwind, especially if the 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

If the model always turns one direction, use the trim control lever below the control stick to correct (see below). The model should fly straight with the control stick at neutral. See page 20 if additional adjustment is needed.



Flying (continued)

Anti-Crash Technology (ACT)

Your Firebird Commander® 2 comes equipped with exclusive Anti-Crash Technology.™ This software helps to prevent crashes due to over-control of pilots. The sensors included in the fuselage “see” the horizon. One sensor is above the canopy and faces forward. The other is at the bottom of the fuselage and faces backward.



These sensors “look” to see the sky and the horizon, and the electronic system that is connected to them knows that the airplane

should not be allowed to enter a steep dive. If you give transmitter input that causes the plane to enter into a spiral dive that may threaten your aircraft, the ACT software will override your input to help prevent the aircraft from crashing to the ground. The ACT will intervene for you when the aircraft is in jeopardy by reducing throttle and changing the directional control as well. The ACT software will only interrupt flight in extreme situations, allowing you to enjoy as much control of the airplane as you need.

Your Firebird Commander 2 comes with the ACT on as the default setting. If you enter a severe dive while flying, you will notice the following things take place:

- You will hear the motor speed reduce as the ACT programming overrides your input. This slows the decent of the aircraft to help prevent a crash.
- The ACT software will give reverse steering input to the aircraft’s electronics to help pull the plane out of a dive.

Flying (continued)

- There will be a noticeable change in the movement of the aircraft if you give it extreme input, and the diameter of turns will be larger.
- The nose of the airplane will only be allowed to reach a limited angle, and then will rise up in order to prevent too much speed from being generated.
- Once the ACT software has taken over, you will not be able to give control input until you have released the steering stick, allowing it to return to neutral. In most cases, you will want to release both sticks in order to allow the plane to recover completely.

When you experience your Firebird Commander 2 doing any of the above actions, the exclusive ACT system is warning you that you have made some transmitter inputs that could put your plane in jeopardy. You can work to correct it by reducing throttle and putting the right stick back toward neutral (or reversing the last input).

Once you have gained more experience, and feel more comfortable flying, you can turn the ACT software off to enter “Expert Mode.” To do this:

- Turn on your transmitter
- Place the flight battery into the fuselage and plug it into the battery connector
- Pull down on the left (throttle) stick for approximately 3 seconds. You will hear two beeps that signal that you have turned off the ACT software and now have full control at all times.
- To reenter the default mode, where ACT is “on”, repeat the steps listed above in this section. You will hear one beep when you repeat these steps, which indicates that the ACT software has been turned back on.
- It is possible to change flight modes in the air, but sufficient altitude is required!

Flying (continued)

IMPORTANT: Even with the ACT activated, it is very important to fly at a sufficient altitude. The system may not save your airplane from over-control if you are too close to the ground.

ALWAYS maintain an altitude of at least 200 feet so that the ACT software has sufficient altitude to work properly to save your aircraft if you enter a severe dive, especially when attempting maneuvers that are more aggressive. Make certain at launch that you climb to a safe altitude prior to more aggressive flight. If, when flying and with the ACT activated, you still feel that your aircraft may be spiraling down too fast, release BOTH sticks until the plane becomes horizontal again. This will allow you to regain control of your aircraft and lessen the chance of a crash.

Because your Firebird Commander® 2 uses sensors that look for the horizon, there could be times when the sensors may not work as

effectively as they could. This may be especially true when the sun is shining brightly and/or is low in the horizon. Do not fly aggressively until you have become very comfortable with flying your Firebird Commander 2. Because of changes in atmospheric conditions, especially the ones mentioned above, do not assume that the ACT software will always save your plane from crashing. Always fly with caution and have patience as you learn the input levels that are necessary for you to safely keep your Firebird Commander 2 in the air.

Since the ACT sensors register information via light, NEVER fly over water, snow or light-colored sand that can confuse the input being received from the sensors to the ACT software system. If you choose to fly in these conditions, you will need to disable the ACT system. We recommend that you always begin flight with the ACT activated before attempting to fly with the ACT in the "off" mode.

Flying (continued)

Note: Flying too low, especially over reflective surfaces, such as rooftops or asphalt, can also place your Firebird Commander 2 in jeopardy.

If you are flying with an X-Port™ accessory, always make sure the ACT software is turned off. However, you should never attempt to fly with an X-Port accessory until you have become more experienced at flying and do not need the ACT to successfully keep you flying.

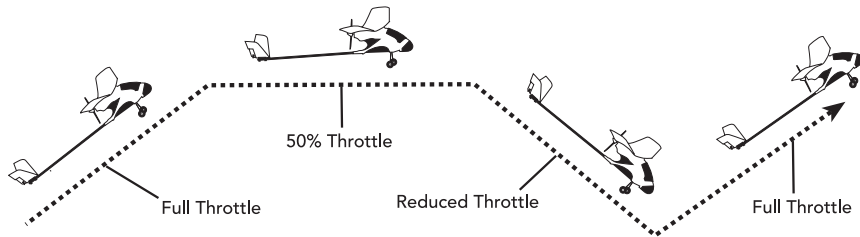
Remember, the purpose of the ACT software is to teach you to fly smoothly. When the ACT software is engaged and overrides your input, it means that you have placed the aircraft in jeopardy. Keeping the steering stick more in the middle and less to the corners will allow you to fly more smoothly and prevent the ACT software from engaging.

If you encounter any questions regarding the Firebird Commander 2 and the ACT software, immediately contact Product Support at 1-800-504-0233.

Throttle Adjustment

1. Climb to an altitude of 150–200 feet with full throttle.
2. To achieve a level “cruising” altitude, reduce power by moving the throttle stick down to approximately 50% of full on.
3. To reduce altitude, reduce throttle.
4. To increase altitude, increase throttle.

Note: If you’re flying with the motor off or at a low speed, allow the Firebird Commander® 2 a bit more area for turns.



Landing

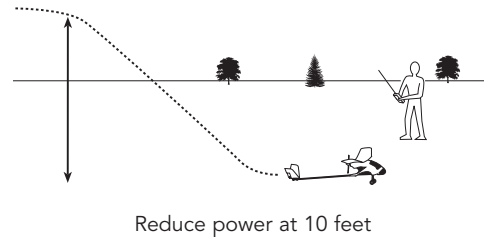
When you notice that the Firebird Commander® 2 no longer climbs well under full power (normally after approximately 12 to 16 minutes), the battery is getting low, and it’s time to land. Line the model up directly into the wind toward the desired landing spot. At 10 feet of altitude, gradually reduce the throttle stick to turn off the motor. The Firebird Commander 2 will glide in for a landing.

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

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. Turn the motor off prior to touchdown in order to prevent damage to the wing and/or propeller.

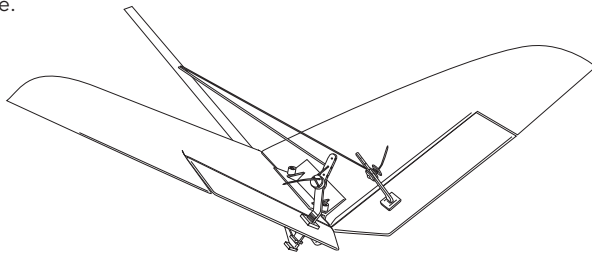
Note: If you are planning on flying over grass (and landing on grass as well), you can remove the landing gear. This allows you to simply “slide” in for a safe landing.



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:

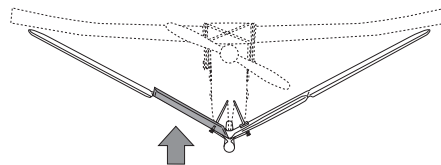
1. Turn the transmitter on, plug in aircraft battery and center the right control stick and trim lever.
2. Use your fingers or a small flat screwdriver to turn the slotted spool on the control horn. Depending on the direction you turn, this will lengthen or shorten the control line.
3. While applying some tension to the control lines, adjust until the control surfaces are level with the rest of the surface.



Making Adjustments: Plane Turns to the Left or Right

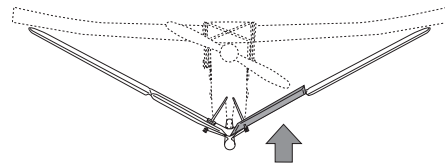
If the airplane keeps turning to the left and adjusting the trim control lever (page 15) does not correct the situation enough to fly straight with the stick at neutral:

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



If the airplane keeps turning to the right and adjusting the trim control lever (page 15) does not correct the situation enough to fly straight with the stick at neutral:

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

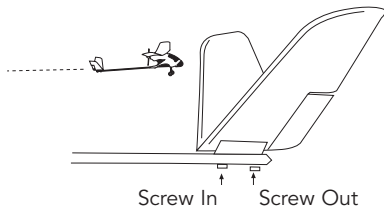


IMPORTANT: If there is a bend (even a small one) in the tail or wing or a tear near the flap areas, it will be impossible to have correct flight control. Replace the damaged part immediately!

Adjusting the Climb Rate

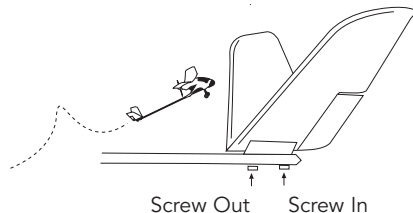
If the airplane, with a fully charged battery, does not climb fast enough with full throttle, you can adjust the climb rate by:

1. Tightening the front tail screw by one full turn and loosening the rear tail screw by one full turn.
2. Test fly.
3. Repeat the above procedure if necessary until the Firebird Commander® 2 climbs adequately under full power.



If the airplane climbs too fast with full throttle, by climbing at a steep angle, stalling and repeating climbing sharply and stalling, do the following:

1. Loosen the front tail screw by one full turn and tighten the rear screw by one full turn.
2. Test fly.
3. Repeat the above procedure if necessary until your Firebird Commander 2 climbs at a steady rate.
4. If, after making maximum adjustments, your Firebird Commander 2 still climbs too steeply, add the wing shim (see page 23).



Adding the Wing Shim

If the climb rate is still too steep after making the tail screw adjustments on the previous page, add the included wing shim.

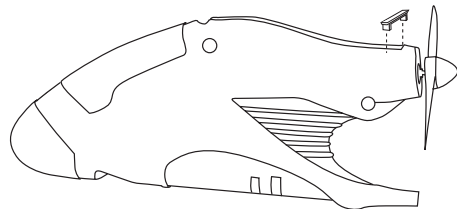
1. Place the wing shim on top of the fuselage at the rear of the wing saddle as shown.
2. Then, place the wing over the wing shim and rubber band the wing to the fuselage as normal.

Adding the wing shim will cause the Firebird Commander® 2 to climb less steeply and reduce the tendency to repeatedly climb and stall. Add the wing shim when the wind is gusting more than 10 mph.

IMPORTANT: Adding the wing shim will cause the Firebird Commander 2 to fly faster, due to the wing's reduced incidence angle.

Needed for Step 17

1mm Wing Shim

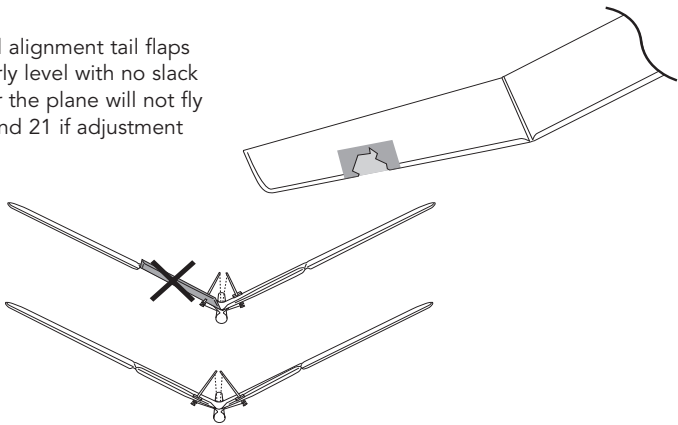


If a Crash Occurs

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 or if the wing or tail is bent, replace damaged parts immediately. See page 30 for a complete replacement parts list.

IMPORTANT: Control alignment tail flaps must be level or nearly level with no slack in the control lines or the plane will not fly well. See pages 20 and 21 if adjustment is necessary.



Warnings and Safety Checklist

1. Follow the instructions in this manual and included video completely, observing all directions. Otherwise, serious injury and/or damage can occur. Think safety first.
2. Keep the propeller away from body parts, even when it isn't spinning, as it could be turned on by accident. Beware of hair becoming entangled in the propeller, especially while launching the Firebird Commander® 2 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 the Firebird Commander 2 near people, vehicles, train tracks, buildings, power lines, water, hard surfaces or trees. Never allow anyone to attempt to catch the Firebird Commander 2 while it's in flight or serious injury can result.
4. Adult supervision is recommended for pilots ages 12 and under.
5. Only use a battery charger intended for use with the Firebird Commander 2 battery. Never leave a charger unattended while charging a battery. This will help prevent overcharging. While charging, place the battery on a heat-resistant surface. Do not lay it on carpet or upholstery while charging. Never charge the battery with the included charger for more than 3 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) can cause fire, serious injury and damage.
7. Hold the plane securely, and keep all body parts away from the propeller when the flight battery is plugged in. When you finish flying the Firebird Commander 2, always unplug the battery before you turn off the transmitter.
8. Never fly on the same frequency as another RC vehicle in your area. The frequency of the Commander 2 is shown on stickers on the back of the transmitter.

Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Unit does not operate	<ol style="list-style-type: none"> 1. Transmitter "AA" batteries are depleted or installed incorrectly as indicated by a dim or unlit LED on transmitter or the low battery alarm 2. No electrical connection 3. Aircraft battery is not charged 4. Crash has damaged the radio inside the fuselage 	<ol style="list-style-type: none"> 1. Check polarity installation or replace with fresh "AA" batteries 2. Push connectors together until they click 3. Charge battery fully 4. 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 	<ol style="list-style-type: none"> 1. Adjust stick trim lever (see page 15) or adjust tail flap position (see page 20–21) 2. Center the wing before each flight
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 20–21) 2. Repair or replace tail
Aircraft keeps pitching up steeply	<ol style="list-style-type: none"> 1. Tail incidence needs adjustment 2. Wing incidence needs adjustment 3. Wind is too gusty or strong 	<ol style="list-style-type: none"> 1. Adjust tail screw (see page 22) 2. Add wing shim (see page 23) 3. 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 shortly before flying 2. Adjust tail screws (see page 22)

Success Tips

1. Beginners should not fly in winds over 7 mph! By doing so, you could cause severe damage to plane or injure someone if you lose control.
2. It is important to choose a flying field carefully—grass and soft ground with 600-foot diameter is optimal to fly and will lengthen the life of your Firebird Commander® 2.
3. Holding the right stick full over for too long may cause the Firebird Commander 2 to spiral dive and it could crash. At the very first sign of the Firebird Commander 2 beginning to spiral down, immediately release the stick and give the opposite control to level the wings.
4. Purchase an extra battery pack and a variable rate DC peak charger to extend your flying time at the flying field. You can charge one battery in your car while you fly with another.
5. If you're gliding with the motor off, which will extend your flight time by using less battery power, allow the Firebird

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 the Firebird Commander 2 upwind, especially on windy days, to prevent it from "flying away." The wind is normally stronger at higher altitudes than it is on the ground.
8. Keep your plane in front of you so you don't have to turn in circles as you fly. Try to avoid flying directly overhead.
9. Don't attempt to fly or do combat maneuvers beyond your flying abilities.

To learn more about flying RC model airplanes, locate your nearest AMA club, learn the AMA safety code and frequency guidelines, and much more, we highly recommend that you contact:

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

Warranty and Follow-Up Procedures

Horizon Hobby, Inc. guarantees your Firebird Commander® 2 to be free from defects in material and workmanship at the date of purchase. This warranty does not cover any component parts, or damage by use or modification. In no case shall Horizon Hobby's liability exceed the original purchase cost. Further, Horizon Hobby reserves the right to change or modify this warranty without notice.

This warranty covers only those products purchased from an authorized Horizon Hobby dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Due to the nature and operation of your Firebird Commander 2 and other HobbyZone® products, the warranty does not extend beyond the initial pre-use testing. Carefully check the parts and operation BEFORE your first use. If you discover defects during pre-use testing, call our Product Support Team toll-free at 877-504-0233 for technical support.

In that Horizon Hobby has no control over the final assembly, or material used for final assembly, no liability shall be assumed nor accepted for any damage resulting from use by the user of the final user-assembled product. By the act of using the user-assembled product, the user accepts all resulting

liability. Please note that once assembly has been started, you must contact Horizon Hobby, Inc. directly regarding any warranty questions. Please do not contact your local hobby shop regarding warranty issues. This will enable Horizon to better answer your questions and service you in the event you need warranty assistance.

Horizon Hobby, Inc. reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon Hobby, Inc. Collateral damage is not covered under this warranty. If you, as the buyer or owner, are not prepared to accept the liability associated with the use of your Firebird Commander 2, you are advised to return it immediately in new and unused condition to the place of purchase.

If you have any questions concerning the operation of your Firebird Commander 2, please contact our Product Support staff toll free at 1-877-504-0233.

If your product requires inspection, please follow these steps in order to return it to us:

1. Call our Product Support team for return authorization.

2. Use the "Service and Repair Checklist" from www.horizonhobby.com under the support tab or write a detailed letter that includes:
 - Your name, address, home phone number, and daytime phone number;
 - A list of the products being shipped for inspection or repair;
 - A detailed account of the type of problems you are incurring; and
 - The payment method you wish to use for any purchases or charges, including credit card type, number, expiration date and your name as it appears on the card.
3. Submit proof of purchase, including purchase date and retailer information.
4. Make sure that the batteries are unplugged and removed. Please use packing material to separate them from product.
5. Pack all components and accessories in the original box, and then pack it in a sturdy box with packing materials for safe shipping.
6. For inspection and/or repair, please ship your product to:
Horizon Service Center
Attn: HobbyZone Department
4105 Fieldstone Road
Champaign, IL 61822

We suggest you ship your product back to us via a carrier that provides package tracking and/or signature required services. Horizon Hobby, Inc. is only responsible for product once it arrives and is accepted at our facility. Most carriers require optional insurance to cover damage or loss in transit, so please consider this when shipping merchandise.

Warranty Service

Providing all warranty conditions have been met, if there are defective parts, they will be repaired or replaced without charge and shipped to you via ground freight prepaid. Again, crash or other collateral damage or expense is not covered under warranty. Proof of purchase date and location is required for all warranty service.

Non-Warranty Service

If our inspection finds the repair cost exceeds \$50 or more than 50% of the value of your product, we will contact you with a repair estimate and advise you of the available options.

If you have any warranty questions that have not been answered by the information listed above, please call our Product Support staff at 1-877-504-0233.

Replacement and Optional Parts

Keep that Firebird Commander® 2 flying! Spare parts are available from your dealer or from Horizon Hobby direct (www.horizonhobby.com). Please check with your dealer first—by supporting your dealer, they'll be there when you need them. To locate your local dealer, go to www.hobbyzonesports.com.

PART#	DESCRIPTION	MSRP	PART#	DESCRIPTION	MSRP
HBZ2610	Standard Decal Sheet	\$4.99	HBZ1060	Tx Battery Cover	\$2.49
HBZ2615	Instruction Manual	\$0.99	HBZ2011	White Rubberbands (5)	\$0.99
HBZ2616	Instructional Video CD	\$2.99	HBZ4060	Wing Shim, 1mm	\$0.99
HBZ2617	Canopy Cover with Hardware	\$2.49	HBZ2012	Tail V-Brace (White)	\$1.49
HBZ2618	Black Nose Piece	\$1.69	HBZ2013	Tail Screws, White (2)	\$0.99
HBZ2631	White Tail with Accessories	\$9.99	HBZ6035	Tail Horn/Kpr (2)	\$0.89
HBZ2661	Fuselage (ACT): CH 1, 26.995	\$49.99	HBZ3351	Tx: CH 1	\$24.99
HBZ2662	Fuselage (ACT): CH 2, 27.045	\$49.99	HBZ3352	Tx: CH 2	\$24.99
HBZ2663	Fuselage (ACT): CH 3, 27.095	\$49.99	HBZ3353	Tx: CH 3	\$24.99
HBZ2664	Fuselage (ACT): CH 4, 27.145	\$49.99	HBZ3354	Tx: CH 4	\$24.99
HBZ2665	Fuselage (ACT): CH 5, 27.195	\$49.99	HBZ3355	Tx: CH 5	\$24.99
HBZ2666	Fuselage (ACT): CH 6, 27.255	\$49.99	HBZ3356	Tx: CH 6	\$24.99
HBZ1012	7.2V 900mAh Battery	\$24.99	Optional Parts and Accessories		
HBZ1085	Motor Screws (5)	\$0.99	HBZ1026	Variable Rate DC Peak Charger	\$19.99
HBZ2519	Wall Charger w/Timer: 6-cell	\$9.99	HBZ1013	8.4V 900mAh Battery	\$29.99
HBZ2521	White Wing	\$14.99	HBZ6023	Aerial Drop Module	\$19.99
HBZ2004	Propeller	\$2.99	HBZ6060	Streamer Bombs for ADM (2)	\$3.99
HBZ2010	2 Wing Hold-Down Rods w/Caps	\$1.49	HBZ6061	Parachute Jumper for ADM (1)	\$3.99
HBZ2016	Landing Gear	\$3.99	HBZ4020	Sonic Combat Module	\$23.99
HBZ1058	Tx Antenna	\$4.99	HBZ3510	Night Flight Module	\$19.99
HBZ1059	Red Tx Ribbon	\$0.79	HBZ4025	Stealth Target	\$23.99

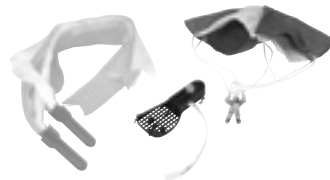
Replacement and Optional Parts (continued)

X-port Accessories

Your Firebird Commander® 2 comes with the ability to add to the excitement of flying. HobbyZone's exclusive X-Port™ technology allows for such things as air-to-air combat, dropping bombs, and even night flight. These items (sold separately) instantly add fun and excitement to X-Port-equipped aircraft.



Rule the air with the **Sonic Combat Module (HBZ4020)**. You can take on other X-Port-equipped aircraft by attaching this to your aircraft and shooting down your buddy's aircraft. When you "hit" his/her aircraft, a high-pitched sound can be heard that signals you have hit his/her aircraft, leaving the motor disabled for about 8 seconds. He/she will still maintain the ability to steer for a safe landing or position himself/herself for a counter attack.



Parachute drops and streamer bombs are included with the **Aerial Drop Module (HBZ6023)**. See who can come the closest to a selected target site, or simply have fun watching the parachutists fall slowly back to the earth with the easy-to-use release mechanism of the electro magnetic latch that is released via the transmitter.



Fly at night with the **Night Flight Module (HBZ3510)**. Recommended for experienced pilots, this module uses super-bright LED's to illuminate the wing and tail of the selected X-Port-equipped aircraft. There are 4 different light modes from which you can choose.

Replacement and Optional Parts (continued)

Optional Parts and Accessories

There are many optional parts and accessories that you can buy to make your flying experience more fun. In addition to X-Port™ items, you can also purchase additional battery packs and a variable rate DC peak charger.



The battery pack that comes with your Firebird Commander® 2 is a **7.2V 900mAh Ni-MH battery pack (HBZ1012)**. It is helpful to have an extra one or two of these on hand while you're flying so that one can be charging while you're using the other ones.



For even more power, you can purchase the **8.4V 900mAh Ni-MH battery pack (HBZ1013)**.



To charge these packs when you're out flying, you will need the **variable rate DC peak charger (HBZ1026)** that plugs into the cigarette lighter in any vehicle. The advantage to having this charger is that it will charge your battery packs in 40 minutes or fewer when you're out at the flying field or park, as compared to the 3-hr wall charger that comes with your Firebird Commander 2.

Future RC Flight

Once you've mastered flying your Firebird Commander® 2, we recommend that you try a 3-channel plane from HobbyZone® for the most successful transition to using a 3-channel airplane. The Aerobird Challenger™ is a great next step, but you could also try the Aerobird Xtreme™. Both of these aircraft are X-Port equipped, so you'll still be able to have fun with the X-Port™ accessories you use with your Firebird Commander 2. Be warned, however, that the Aerobird Xtreme is much larger and heavier, and will therefore fly much faster than the Aerobird Challenger. If you choose to go from flying the Firebird Commander 2 to flying the Aerobird Xtreme, we recommend that you have a very experienced RC pilot with you for your first flights until you get comfortable flying a larger, faster airplane. Reacting to difficult situations with the Firebird Commander 2 will be much different than with the Aerobird Challenger and Aerobird Xtreme since you use a 3-channel transmitter and the airplanes are bigger and faster.

We hope you enjoy flying your new Firebird Commander 2, and thank you for supporting HobbyZone. Please let us know how we can help you in the future. We hope your flights with this plane are just the beginning of a long and positive RC experience. Best wishes in the hobby.

Sincerely,
The HobbyZone Team