


hobbyzone®

Mini Super Cub Instruction Manual



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Horizon Hobby, Inc.
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Champaign, IL 61822
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Horizon Hobby UK
Units 1-4, Ployters Road
Staple Tye
Harlow, Essex
CM187NS
United Kingdom

Horizon Hobby Deutschland GmbH
Hamburger Strasse 10
25335 Elmshorn
Germany

www.hobbyzonerc.com
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RTF
READY-TO-FLY

ACT
ANTI-CRASH
TECHNOLOGY

|||
THREE
CHANNEL



Welcome
to the World of

hobbyzone®

Congratulations on your purchase of the HobbyZone® Mini Super Cub RTF electric airplane. Your Mini Super Cub comes complete with everything you need, all in one box, to get you in the air and flying.

A DVD is also included to give you some helpful hints before you take to the sky. Your Mini Super Cub uses advanced Anti-Crash Technology (ACT) that allows you to safely train with a fully proportional 3-channel aircraft and radio system. The Mini Super Cub has built-in sensors that look for the sky and horizon, and thanks to the specially programmed software, it can temporarily "take over" in the event that your aircraft is put in danger from incorrect transmitter input. This will help to prevent a crash and keep you in the air.

Once you are more experienced and no longer need the training software, you can simply turn off the ACT with the push of a button. When this is done, you will have full control at all times, allowing you to perform exciting maneuvers such as loops and spirals.

Please read this instruction manual thoroughly and watch the DVD prior to flying for the first time. This will greatly add to your flight experience and help to ensure success on your first flight.

Crash damage is not covered under the warranty.

Be sure to read the warranty on page 41 and "Warnings and Safety" on page 35 before you proceed to Step 1.

Please register your Mini Super Cub online at www.hobbyzonerc.com.

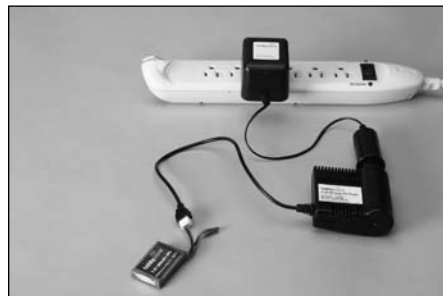
Charging the Aircraft Battery

Your Mini Super Cub comes with a 12V DC balancing charger and a 2S Li-Po battery pack. You must charge the included Li-Po battery pack with a Li-Po specific charger only (such as the included charger). **Never leave the battery and charger unattended during the charge process.** Failure to follow the instructions properly could result in a fire. When charging, make certain the battery is on a heat-resistant surface.

Charging the Aircraft Battery:

The 12V DC 2S Li-Po balancing charger provides a charge current of .3A (300mA). The typical charge time for the included 7.4V 300mAh Li-Po is approximately 40 minutes to 1 hour.

1. Plug in the battery, the LED will blink indicating it is charging.



2. The LED on the charger will begin to blink and will turn to solid red when charging is complete.

Note: In some newer vehicles, the vehicle must be running for the 12V accessory outlet to be operational. It is not recommended to charge the battery pack while the vehicle is in motion. You may wish to purchase a 12V adapter lead which will allow you to connect your charger directly to the vehicle's battery for charging at the field (part number HBZ6513).

Installing the Batteries into the Transmitter

1. Remove the transmitter back cover.



2. Install the included AA batteries. Use four fresh 1.5V AA batteries only.

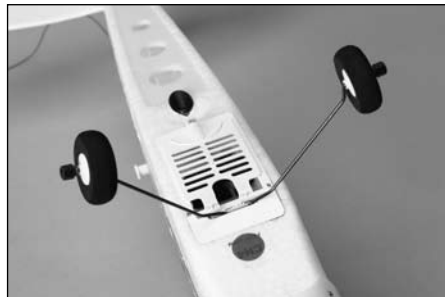


3. Be sure to observe proper polarity when installing the batteries, and then replace the cover.
4. To test, switch on the transmitter. The LED should glow brightly.
5. Replace the batteries when you hear the low battery alarm (beeping sound).

Note: You may notice a small switch immediately below the LED and the power switch. This small switch determines the "mode" that the transmitter operates on. The default position is the switch to the left (Mode 2). Moving the switch position to the right allows the transmitter to operate on Mode 1. For more details on Mode 1 vs. Mode 2 controls, please see pages 11 & 12.

Installing the Landing Gear and Tail Wheel

1. Locate the included wire landing gear.
2. Slide the landing gear into the allotted slot on the bottom of the fuselage.
3. Make sure the gear is securely in the slot by gently pulling on it after it is attached.

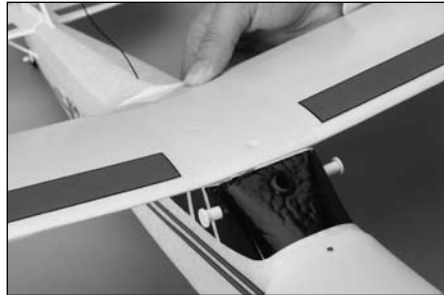


4. Attach the tail wheel by sliding the wire into the slot located at the rear of the fuselage.



Installing the Wing

1. Locate the wing and the included rubber bands.
2. Place the wing so that it is centered on the top of the fuselage.

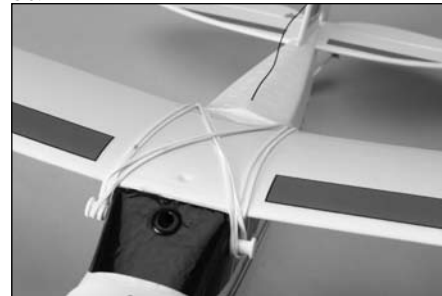


3. Use the included rubber bands to secure the wing by attaching two bands straight across the top of the wing, where each end is attached to each set of band holders, and crisscrossing two diagonally across the top of the wing.
4. Make certain the wing is properly attached and centered prior to each flight.

3a.



3c.



3b.



Transmitter Control Identification

Note: Each time before you fly you should ALWAYS turn the transmitter on before connecting the flight battery to the ESC unit. After each flight, be sure that you always disconnect the flight battery from the ESC unit before powering the transmitter off.

Mode 2



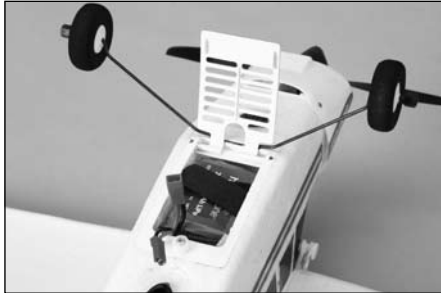
Mode 1



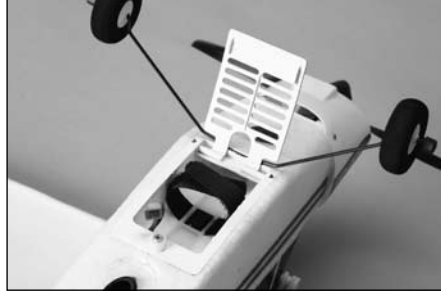
Tail Control Test

1. Make certain the throttle is in the OFF position (throttle stick centered). Turn the transmitter on.
2. Install the flight battery in the fuselage and plug the battery lead into the lead inside the airplane.

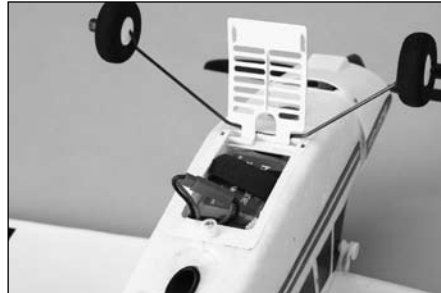
2b.



2a.



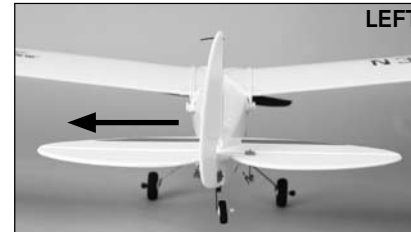
2c.



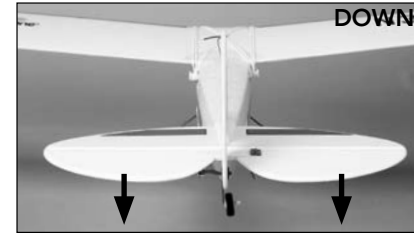
3. Move the rudder stick to the right and the rudder (moving portion of the vertical tail) should move to the right.



- Move the rudder stick to the left and the rudder should move to the left.



4. Push the elevator stick full forward. When this is done, the elevator should move down (as shown), causing the plane to pitch down.



5. Pull back on the elevator stick. When this is done, the elevator should move up (as shown), causing the plane to pitch up.



6. **If your airplane is not responding, DO NOT FLY IT.** Some correction is needed. Please refer to the troubleshooting section at the end of this manual. If further assistance is still needed, please call the Horizon Support Team at 1-877-504-0233.

7. When you are satisfied your airplane is set up properly, you can unplug the flight battery and then turn off the transmitter. This should be done every time you have finished flying.

NOTE: It is very important to make sure that the control surfaces (rudder and elevator) are at 0 degrees when the rudder and elevator sticks are also centered (at neutral). Ideally, they will be at 0 degrees when the transmitter is powered on. The next step explains how to make adjustments to the control surface.

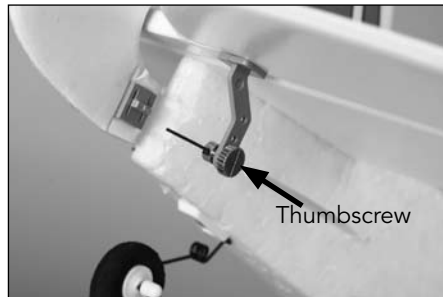
Making Adjustments to the Control Surfaces

1. Any changes necessary to bring both the rudder and the elevator to neutral (zero degrees) should be possible using the digital trim buttons on the transmitter. To do this, place the control stick at center and use the digital trim buttons near the control stick to adjust the rudder (vertical moving surface) until it is flush with the vertical fin (vertical stationary portion of the tail). To adjust the elevator so that it is flush with the horizontal stabilizer, use the digital trim buttons located near the elevator stick.
2. If you find you are not able to align the control surfaces to be flush with each other using the digital trims alone, please follow the adjustment procedure on the following page. Do not attempt to fly until the control surfaces have been adjusted to zero degrees deflection!

3. If corrections are needed and adjustment via the digital trim buttons is not adequate, you will need to perform the following steps to manually adjust the control surfaces.

- Turn on the transmitter.
- Insert the flight battery into the fuselage and plug the battery into the lead from the airplane.
- Return the trims to center (signified by a long tone).
- Loosen the thumbscrew on the control horn and move the control surface back to neutral with the rest of the tail surface. Re-tighten the thumbscrew.

Always make sure the control stick is centered at neutral prior to making any adjustments.

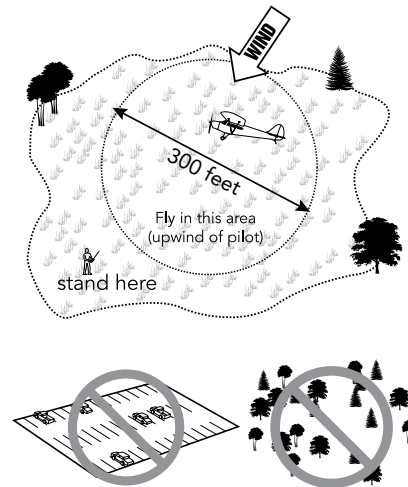


Flying Area

In order to have the most success and to protect property and your Mini Super Cub, it is very important to select a place to fly that is very open.

The site should:

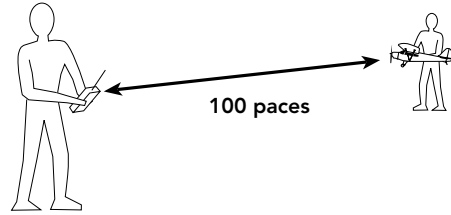
- Have a minimum of 300 feet (90 meters) of clear space in all directions.
- Be clear of pedestrians.
- Be free of trees, buildings, cars, power lines or anything that could entangle your airplane or interfere with your line of sight.
- Remember, your Mini Super Cub can reach speeds of up to 30 mph (48 k/h), so it can cover ground quickly.
- Plan on flying in an area that gives you more space than you think you need, especially with first flights.



Range Test

Prior to your first flight, you will need to perform a range test. Two people are needed to do this—one to hold the airplane and one to hold the transmitter.

1. One person holds the transmitter while the other person walks 100 paces away with the Mini Super Cub.
2. Be sure the throttle is in the OFF position.
3. Extend the antenna and turn on the transmitter.
4. Plug in the flight battery, close the hatch cover and turn the latch so the hatch cover stays in place.
5. As soon as the throttle is advanced, the prop should spin quickly.



6. As the person moves the transmitter controls, the airplane should respond correctly with the controls operating smoothly.

Choose a Calm Day

We know you want to have fun and fly your Mini Super Cub, however, flying in too much wind can place your airplane in jeopardy. On your first flight, make sure the winds are no stronger than 5 mph.

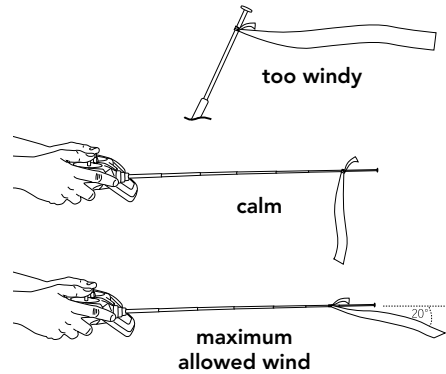
To check wind conditions:

1. Tie the included red ribbon to the end of the transmitter antenna.
2. Hold the transmitter so that the antenna is parallel to the ground. If the ribbon hangs down, you're good to fly. If the angle between the antenna and the ribbon is less than 25 degrees, it's too windy for beginning pilots to fly.

Always position yourself so that when you are flying, the airplane is UPWIND of you. Never let the airplane come too far downwind where it can be carried farther and farther away from you and be lost. Additionally, the winds are stronger at higher altitudes. Do not climb too high or you could lose control of your airplane.

It is ok to fly higher, just make sure you are watching carefully to see how the aircraft is reacting. Generally a good altitude to fly is approximately 300 feet.

HINT: In many places, you will find that the winds are the calmest in the mornings (shortly after sunrise) and evenings (about an hour prior to sunset). You may want to prepare and fly your first flights during those times. Flying in too much wind is by far the number one reason for crashes/lost planes.



Anti-Crash Technology™ (ACT)

Your Mini Super Cub comes equipped with exclusive Anti-Crash Technology. This software will help to prevent crashes due to over-control. The sensors that are located on the fuselage “see” the horizon. One sensor is located at the top of the windshield and the other is on the bottom side of the fuselage, in front of the landing gear.

The electronic system connected to the sensors knows that the airplane (with ACT On) should not be allowed to enter a steep dive. If you give transmitter input that causes the plane to enter into a steep dive that could lead to a crash, the ACT software will override your input to help prevent the aircraft from crashing to the ground. ACT will cut the power going to the motor and add some up elevator, as well. This causes the nose of the airplane to pull up, thereby helping to prevent your aircraft from crashing. However, in order for ACT to work properly, there has to be sufficient altitude for recovery (at least 200 feet or 61 meters). ACT will only interrupt flight in extreme situations, allowing you to enjoy as much control of your Mini Super Cub as you need.

If, with ACT on, you enter into a threatening dive, you will notice the following.

- You will hear the motor power decrease as the ACT programming overrides your input. This slows the speed of the airplane and will reduce the risk of a crash.
- The ACT software will give up elevator input to help pull the nose up and out of the dive.
- Once the ACT software has been engaged (takes over), you will not regain control until after you have released the steering stick and returned it to neutral.

Remember, the purpose of Anti-Crash Technology is to help you learn to fly properly and smoothly. When ACT is engaged, it means you have placed your aircraft in jeopardy. Keeping the stick

more in the middle and less to the “corners” of the transmitter will allow you to fly more smoothly and prevent ACT from engaging. The key is to learn to make minor movements on the controls. The transmitter is proportional and is sensitive to small movements of the control stick. Once you have gained more experience and feel comfortable flying, you can turn off ACT and have full control at all times. It is possible to change flight modes (turn ACT on or off) while in flight, but sufficient altitude is required.

To disable ACT

To turn off ACT, simply push inward on the surface control stick (right stick). The red LED on the transmitter will blink indicating that ACT has been turned off.

ACT Flying Tips

- Never fly at too low of an altitude and expect ACT to save you from a crash. You must maintain an altitude of at least 200 feet (61 meters) for the software to be able to help prevent crashes.
- Even when flying with ACT on, if you feel that your aircraft is in jeopardy, reduce throttle immediately and release the stick. You can then add a small amount of up elevator (pull back slightly on the stick) to aid the recovery.
- There may be times when the sensors used to activate the protective software can be fooled. This may be especially true when flying in very bright sunshine and/or when the sun is close to the horizon.
- Never fly over water, light colored sand, ice, snow or anything else that can reflect light and “fool” the sensors when ACT is on.
- Never fly in too tight of an area. ACT will not prevent you from crashing into trees, buildings or other obstacles.
- Make several successful flights (including several soft landings) prior to attempting to fly with ACT off.
- Never let the aircraft fly too far downwind from you, which can cause the aircraft to fly away.
- It is always a good idea to have an experienced pilot who has mastered control with at least a 3-channel radio system to help you on your first flights.

Using Elevator (Pitch Control)

Your Mini Super Cub is equipped with an elevator for pitch control. Pulling back on the transmitter stick will cause the nose of the airplane to rise and allows for tighter turns, shorter runway take-offs, flares for landing, a better climb rate and the ability to perform aerobatic maneuvers, such as loops and stalls.

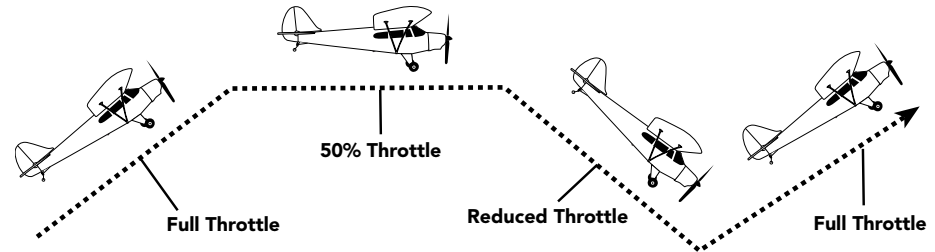
However, giving too much UP elevator (pulling back too much on the stick) can also place your aircraft in jeopardy. Your airplane can enter an unplanned stall, especially when the plane is traveling at slower speeds.

Just after a stall occurs, the nose of the airplane will go down and the airplane will begin to enter a dive. To recover from a stall, pull the stick back slowly (UP elevator) to pull the nose out of the dive. This should return the airplane to straight and level flight. Be careful, as pulling back too quickly or too far will once again cause the plane to enter a stall.

Throttle Adjustment

1. When launching, the throttle should be full on.
2. Once you have achieved the altitude where you want to fly, you can reduce throttle to about 50% for cruising. This will allow for longer flights.
3. If you want to reduce altitude, reduce throttle to less than 50%.
4. To increase altitude, increase throttle to more than 50%.

Note: If you're flying with the motor off, or at a slow speed, allow the Mini Super Cub a bit more area for turns.



Hand Launch

On first flights, it is a good idea to have a second person, ideally an adult, help you launch the plane. This will allow you to focus entirely on the transmitter input.

1. Make sure the battery is fully charged.
2. Make certain that no one is flying, or preparing to fly, on the same channel within approximately ½ mile (800 meters). If someone were to turn on a transmitter on the same frequency as yours, you will lose control of your airplane. This could cause damage to your airplane, cause it to fly away, or cause damage to other property if your airplane were to crash into it. When you are confident it is safe to turn on your transmitter, you can move on to the next step.
3. Install and plug in the flight battery.
4. If you are hand launching the aircraft yourself, place the plane in your right hand and the transmitter in your left hand.
5. Use caution and advance the throttle to FULL.
6. Take a few steps forward and toss the airplane directly and firmly into the wind, while keeping the airplane and its wings level with the ground.
7. Allow the plane to climb steadily at full throttle, into the wind, until you have achieved an altitude of 100 to 150 ft (30 to 46 meters). You will not need to use elevator in order for your airplane to climb. A few clicks down on the elevator trim should allow a steady climb.

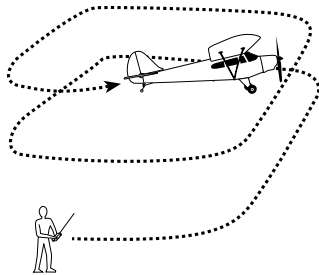
Runway Takeoff (ROG)

Your Mini Super Cub can be launched by way of a runway takeoff (ROG). However, this is not recommended for inexperienced pilots.

1. Make sure your landing gear is properly installed.
2. Stand behind your Mini Super Cub and point it directly into the wind on smooth asphalt or concrete.
3. Apply FULL power via the throttle and adjust the control stick as necessary to keep the aircraft headed directly into the wind.
4. If the battery is fully charged, your Mini Super Cub should lift off the ground in approximately 30 feet (12 meters). Apply some up elevator by pulling back on the stick, and the plane will lift off of the ground in a shorter distance. Remember, only a small amount of up is needed. Too much will cause a stall after your aircraft has left the ground.

Flying

1. After you have launched your Mini Super Cub, it will begin climbing at full throttle. With the throttle advanced all the way forward, your Mini Super Cub should not need any elevator input to climb steadily.
2. Make adjustments on the throttle stick and control stick that are necessary to keep your aircraft heading directly into the wind. Do not attempt a turn until you have reached a minimum of 50–100 feet (15–30 meters) of altitude (about as tall as a four-story building).
3. Control range is 1300 feet, so if you fly beyond that, you will lose control of your airplane. At that distance, however, you would likely lose sight of your airplane before you'd lose control.
4. Don't let your airplane get too far downwind from you. Always fly with the airplane UPWIND from you. Failure to do this could result in a fly-away! Remember, the wind is stronger as your plane flies higher in the air. It's ok to fly higher, just be cautious and watch how your plane reacts to the wind. Most of the time, you can fly at higher altitudes at half-throttle. This is great for smooth, easy flying when you're first learning to fly and it also conserves battery power.
5. When you have reached higher altitudes and want to practice using the elevator, begin with small and smooth inputs to the transmitter. Very little input is needed to get the plane to turn, climb or descend.
6. Avoid long vertical dives, with the motor on or off as it can cause a lot of stress on the aircraft.
7. It may be helpful to fly in smooth large ovals at higher altitudes so that you can get used to steering the plane with the nose coming toward you. Flying with the plane coming toward you takes some practice and is one of the hardest things to get used to when you first begin to fly.



Sharp Turns: Move the stick in the direction you want to turn and add a bit of up elevator at the same time (pull back on the stick). The plane will make a sharper banking turn.

Rudder Trim: If the Mini Super Cub seems to drift in one direction when the control stick is in the neutral (centered) position, push the rudder trim buttons below the control stick in the opposite direction of the drift. Adjust until the plane flies straight with the control stick at neutral.

Elevator Trim: If the Mini Super Cub always “hunts” up or down, use the trim buttons next to the elevator stick to correct this problem. If it hunts up, push the upper trim button until it flies level. If it hunts down, push the lower trim button until it flies level. The Mini Super Cub should fly straight with the stick at neutral. Your Mini Super Cub should have a steady climb at full throttle when it is trimmed properly.

Landing

When you notice that your Mini Super Cub no longer climbs well under full power, normally after 6-8 minutes, the battery is getting low and it is time to land. Line the airplane up directly into the wind toward the desired landing spot. At about 10-15 feet of altitude, reduce the throttle gradually until it is completely off. Your Mini Super Cub will glide in for a landing.

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

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 propeller.

EXPERT TIP: As you get more experienced at flying, try adding a bit of UP elevator (pull back on the elevator stick) just before touchdown to “flare” the plane. With some practice, your landings will be smooth and on target.

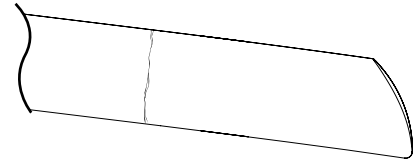
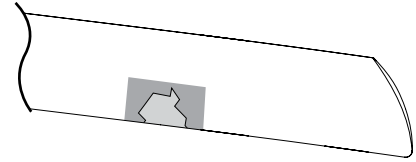
Aerobatic Flight

It is recommended earlier in this instruction manual that the Mini Super Cub controls be set for softer responses in the outer holes of the control surfaces. Once you get used to the flight characteristics and want to perform more aerobatic maneuvers (with ACT off), you can change the amount of throw that is permitted by moving the clevises to the inner holes of the control horns. After making any adjustments, always turn on the transmitter, center the control surface trims and make sure the control surfaces are even. Make the proper adjustments to make the surfaces even, if they are not.

Note: By making these changes, the controls will be much more responsive. This makes the airplane much less forgiving and it will be easier to stall. Remember, crash damage is not covered under the warranty.

Repairing Minor Damage

If you happen to crash and part of the tail or wing breaks, it can be repaired using packing tape to cover the missing pieces. Also, foam safe CA will help repair the foam fuselage and wing. If damage is severe or if the wing and/or tail are bent, replace the damaged parts prior to flying again. There is a complete list of replacement parts in the back of this manual.



Replace wing immediately

Warnings and Safety Checklist

1. Read and follow this manual completely, along with the included DVD, observing all instructions and safety directions. If you do not do this, serious injury and damage can occur. Think about safety first.
2. Keep the propeller away from all body parts at all times! Beware of loose clothing or hair becoming entangled in the propeller.
3. Never fly when it is too windy or you may lose control of the airplane. Never fly near people, vehicles, train tracks, buildings, power lines, water or trees. Never attempt to catch the airplane.
4. Adult supervision is recommended for ages 14 and under.
5. Only use a battery charger that is compatible for use with the Mini Super Cub battery. We recommend using the chargers that come with your airplane. Never leave the chargers unattended while charging! During charging, place the battery and charger on a heat-resistant surface. Do not place them on carpet or upholstery.
6. Never cut into the battery charger or airplane wires, or serious injury can occur. Causing the battery to short out (crossing positive and negative bare wires) can cause a fire, serious injury and damage.
7. Hold the airplane securely and keep all body parts away from the propeller at all times. Carry the plane as though the propeller could start spinning at any time when you have the battery pack plugged into the lead from the plane.
8. After you have finished flying, or at any time you have the radio system on, ALWAYS unplug the airplane battery prior to turning the transmitter off. ALWAYS turn on the transmitter prior to plugging the flight battery in.
9. Never fly on the same frequency as another RC vehicle in your area. Doing so will cause you or the other person to lose control of your plane.

Success Tips

1. Don't fly in winds over 7 mph (11 kph). First-time pilots should get help from an experienced radio control pilot during first flights.
2. Choose your flying field carefully—grass and soft ground with a 600-foot (183-meter) diameter of open space is optimal for flying and will lengthen the life of the Mini Super Cub. Make sure there are no obstacles that will get in your way when flying, such as trees or buildings. Make sure you do not fly where there are pedestrians who could be hurt by the airplane.
3. Remember that holding the stick full over for too long can cause the airplane to spiral dive and crash. At the very first sign of the Mini Super Cub beginning to spiral down, immediately release the stick and give the opposite turn control to the spiral. Pull back gently on the elevator to level flight and level the wings.
4. Don't attempt to fly or do maneuvers beyond your flying abilities without seeking the assistance of an experienced pilot.
5. If you're gliding with the motor off, allow the Mini Super Cub 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 the Mini Super Cub upwind, especially on windier 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.

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 the transmitter or the low battery alarm 2. No electrical connection 3. Flight 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 are secure 3. Fully charge the battery 4. Replace the fuselage or receiver
Aircraft keeps turning in one direction	<ol style="list-style-type: none"> 1. Rudder or rudder trim is not adjusted correctly 2. Wing is not centered over the fuselage 	<ol style="list-style-type: none"> 1. Adjust stick trims or manually adjust rudder position (see pg. 13) 2. Center the wing

PROBLEM	POSSIBLE CAUSE	SOLUTION
Aircraft is difficult to control	1. Wing or tail is damaged	1. Replace damaged part
Aircraft keeps pitching up steeply	<ol style="list-style-type: none"> 1. Wind is too gusty or strong 2. Elevator is trimmed 'up' too much 	<ol style="list-style-type: none"> 1. Postpone flying until the wind calms down 2. Adjust elevator trim 'down'
Aircraft won't climb	<ol style="list-style-type: none"> 1. Battery is not fully charged 2. Elevator may be trimmed 'down' 	<ol style="list-style-type: none"> 1. Charge battery fully shortly before flying 2. Adjust elevator trim 'up' (see pg. 13)

Warranty and Follow Up Procedures

Warranty Period:

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

Limited Warranty

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon 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. This warranty does

not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits:

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use,

setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

Safety Precautions:

This is a sophisticated hobby Product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended

for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

Questions, Assistance, and Repairs:
Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a service technician.

Inspection or Repairs:
If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. A Service Repair Request is available at www.horizonhobby.com on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be

sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

Warranty Inspection and Repairs:
To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

Non-Warranty Repairs:
Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair.

Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. Please note: non-warranty repair is only available on electronics and model engines.

United States:
Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Service Center
4105 Fieldstone Road
Champaign, Illinois 61822

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support
4105 Fieldstone Road
Champaign, Illinois 61822

Please call 877-504-0233 or e-mail us at productsupport@horizonhobby.com with any questions or concerns regarding this product or warranty.

United Kingdom:
Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Hobby UK
Units 1-4 Ployters Rd
Staple Tye
Harlow, Essex
CM18 7NS
United Kingdom

Please call +44 (0) 1279 641 097 or e-mail us at sales@horizonhobby.co.uk with any questions or concerns regarding this product or warranty.

Germany:
Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Technischer Service
Hamburger Strasse 10
25335 Elmshorn
Germany

Please call +49 4121 46199 66 or e-mail us at service@horizonhobby.de with any questions or concerns regarding this product or warranty.

Warning

Though your HobbyZone Mini Super Cub comes ready to fly, this aircraft is not a toy. It can cause serious bodily harm and damage to property.

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



Instructions for Disposal of WEEE by Users in the European Union

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

Declaration of Conformity (in accordance with ISO/IEC 1705-1)

Product(s): Mini Super Cub
Item Number(s): HBZ4800

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 300-220	Technical requirements for Radio equipment
EN 301 489-1, 301 489-3	General EMC Requirements for Radio equipment
EN60950	Safety



Horizon Hobby, Inc.
9/10/2008

Steve Hall
VP International Operations and
Risk Management

Replacement Parts

Replacement parts are available at your local hobby shop or www.horizonhobby.com.

PART#	DESCRIPTION
HBZ1017	7.4V 300mAh Li-Po Battery: Mini Super Cub
HBZ1058	Transmitter Antenna: HBZ/PKZ transmitters
HBZ4747	12V 500mAh AC Power Supply Adapter
HBZ4804	Prop Shaft w/Hardware: Mini Super Cub
HBZ4807	Propeller: Mini Super Cub
HBZ4808	Spinner: Mini Super Cub
HBZ4810	Decal Sheet: Mini Super Cub
HBZ4812	Fuselage Battery Door w/Latch: Mini Super Cub
HBZ4814	Firewall w/Screws: Mini Super Cub
HBZ4817	Tail Wheel: Mini Super Cub
HBZ4818	Landing gear: Mini Super Cub
HBZ4820	Standard Wing: Mini Super Cub
HBZ4824	Wing Hold Down Rods w/Caps (2):Mini Super Cub
HBZ4825	Complete Tail w/Accessories: Mini Super Cub
HBZ4826	Cowl: Mini Super Cub
HBZ4827	White Rubber Bands: Mini Super Cub
HBZ4829	Complete Gearbox: Mini Super Cub
HBZ4834	Motor with leads and pinion: Mini Super Cub
HBZ4847	12V DC 2-cell Li-Po Charger (300mA): Mini Super Cub
HBZ4851	ESC/RX Ch 1: Mini Super Cub
HBZ4852	ESC/RX Ch 2: Mini Super Cub
HBZ4853	ESC/RX Ch 2: Mini Super Cub
HBZ4854	ESC/RX Ch 4: Mini Super Cub
HBZ4855	ESC/RX Ch 5: Mini Super Cub

PART#	DESCRIPTION
HBZ4856	ESC/RX Ch 6: Mini Super Cub
HBZ4861	Fuselage Ch 1: Mini Super Cub
HBZ4862	Fuselage Ch 2: Mini Super Cub
HBZ4863	Fuselage Ch 3: Mini Super Cub
HBZ4864	Fuselage Ch 4: Mini Super Cub
HBZ4865	Fuselage Ch 5: Mini Super Cub
HBZ4866	Fuselage Ch 6: Mini Super Cub
HBZ4885	Bare Fuselage: Mini Super Cub

Optional Parts

PART#	DESCRIPTION
HBZ6513	Alligator Clip: 12V Power Adapter
EFLA230	Charge Lead w/JST Female

Please register your Mini Super Cub online at www.hobbyzonerc.com.