

**Assembly Manual** 

# **Table of Contents**

Introduction	3
Required Radio Equipment	3
Specifications	
Öutrunner Motor Setup	4
Optional Accessories	
Required Tools and Adhesives	4
Contents of Kit/Parts Layout	
Warning	
Before Starting Assembly	5
Note on Lithium Polymer Batteries	6
Using the Manual	6
Limited Warranty Period	6
Safety Precautions	
Questions, Assistance, and Repairs	

Questions or Assistance	6
Limited Warranty & Limits of Liability	
Inspection or Repairs	8
Warranty Inspection and Repairs	
Non-Warranty Repairs	
Aileron Servo Installation	
Motor Installation	13
Landing Gear Installation	18
Elevator Servo Installation	
Rudder Installation	
Final Assembly	
Center of Gravity / Battery Installation	
Control Throws	
Flying the Super Airliner	
2006 Official AMA	
National Model Aircraft Safety Code .	34

#### Introduction

Thank you for your purchase of the Super Airliner from E-flite bringing you, the modeler, the jet experience without the hassle of glow powered ducted fans or the cost of turbine engines. We selected a twin airliner design for the enlarged wing area, and multiple engines for more power in flight. The model is molded from EPS foam for durability and ease of repair should the need arise. All of our Airliners have weighed in at  $3^{1}/_{4}$  pounds, ready for flight, using two Thunder Power 2100 mAh 11.1V Li-Po batteries. We use the BEC function of both speed controllers to save weight and ensure trouble-free radio operation.

The Super Airliner is designed for use from hard surface runways or very smooth grass fields. It was not designed for rough grass fields and has not been tested for such operations. The tires are small and work very well from hard surface runways. Please take note of the flight control surface throws in the back of the manual. These are correct and you will need this amount of throw to fly this model. Trying anything less will diminish your chances of success. Ducted fan aircraft do not have the prop blast feature associated with propeller driven aircraft over the flight controls. For this reason, you need more control throw than you would need on a propeller-driven model.

Flight times of 8 minutes or longer are the normal procedure with the Airliner using the equipment specified in this manual. We hope you enjoy your experience with this new offering from E-flite. So start building and set the date for your first takeoff with E-flite Air!

# **Required Radio Equipment**

#### Radio System

You will need a minimum 4-channel transmitter, crystal, one standard BB servo, and four sub-micro servos. If you are using an existing transmitter, just purchase the other required equipment separately.

#### **Purchase Separately**

JSP30600	RS600 6-Channel Receiver w/o Crystal
JRPXFR**	FM Receiver Crystal
JSP20060	ST47BB Servo
JSP98110	6" Servo Extension (2)
JSP98030	12" Servo Extension (3)
JSP98020	6" Y-Harness (3)
EFLRS75	S75 Sub-Micro Servo (4)

### **Specifications**

Wingspan: 55 in (1400mm) Length: 57 in (1450mm)

Wing Area: 505 sq in (32.5 sq dm)

Weight w/o Battery: 2.6 lb (1.2 kg) Weight w/Battery: 3.25 lb (1.5 kg)

### **Outrunner Motor Setup**

EFLM1320DF2 BL400 DF Outrunner 3500Kv (twin pack)

OR

EFLM1320DF BL400 DF Outrunner 3500Kv (2)

EFLA311B 20-Amp Brushless ESC (2)

THP21003SPL 2100mAh 3-Cell 11.1V Li-Po, 16GA (2) EFLC3005 Celectra 1-3 Cell Li-Po DC Charger

DUB439 Heat Shrinkwrap, 1/4" (6mm)

### **Optional Accessories**

EFLA110 Power Meter

### **Required Tools and Adhesives**

#### Tools

Small Phillips Screwdriver

(EFLA257 - included with EFLA250)

Hex Wrench: 1.5mm

(EFLA251 - included with EFLA250)

Flat blade screwdriver

Model clamps Small round file

Drill Ruler

Pencil Side cutters Soldering iron Solder

Hobby knife Rubber bands

Drill bit: 1/16" (1.5mm), 5/64" (2mm)

#### **Adhesives**

Thin CA 6-Minute Epoxy (HAN8000) Medium CA 30-Minute Epoxy (HAN8002)

Threadlock

# **Contents of Kit/Parts Layout**

#### Large Replacement Parts:

• .	
EFL7001	Wing w/Ailerons
EFL7002	Fuselage w/Hatch & Pushrods
EFL7003	Vertical Fin & Rudder
EFL7004	Main Landing Gear w/Wheels
EFL7005	Nose Gear w/Wheels
EFL7006	Engine Nacelle
EFL7007	Ducted Fan Unit
EFL7008	Decal Sheet



### **Warning**

An RC aircraft is not a toy! If misused, it can cause serious bodily harm and damage to property. Fly only in open areas, preferably at AMA (Academy of Model Aeronautics) approved flying sites, following all instructions included with your radio.

Keep loose items that can get entangled in the propeller away from the prop, including loose clothing, or other objects such as pencils and screwdrivers. Especially keep your hands away from the propeller.

# **Before Starting Assembly**

Before beginning the assembly of your Airliner, remove each part from its bag for inspection. Closely inspect the fuselage, wing panels, rudder and stabilizer for damage. If you find any damaged or missing parts, contact the place of purchase.

# **Note on Lithium Polymer Batteries**



Lithium Polymer batteries are significantly more volatile than alkaline or Ni-Cd/Ni-MH batteries used in RC applications. All manufacturer's instructions and warnings must be followed closely. Mishandling of Li-Po batteries can result in fire. Always follow the manufacturer's instructions when disposing of Lithium Polymer batteries.

# Using the Manual

This manual is divided into sections to help make assembly easier to understand, and to provide breaks between each major section. In addition, check boxes have been placed next to each step to keep track of each step completed. Steps with a single circle ( $\bigcirc$ ) are performed once, while steps with two circles ( $\bigcirc$   $\bigcirc$ ) indicate that the step will require repeating, such as for a right or left wing panel, two servos, etc.

Remember to take your time and follow the directions.

# **Limited Warranty Period**

Horizon Hobby, Inc. guarantees this product to be free from defects in both material and workmanship at the date of purchase.

### **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 Hobby, Inc. directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance.

### **Questions or 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.

# **Limited Warranty & Limits of Liability**

Pursuant to this Limited Warranty, Horizon Hobby, Inc. will, at its option, (i) repair or (ii) replace, any product determined by Horizon Hobby, Inc. to be defective. In the event of a defect, these are your exclusive remedies.

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 an authorized Horizon Hobby, Inc. service center. This warranty is limited to the original purchaser and is not transferable. In no case shall Horizon Hobby's liability exceed the original cost of the purchased product and will not cover consequential, incidental or collateral damage. 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. Further, Horizon Hobby reserves the right to change or modify this warranty without notice.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. HORIZON HOBBY, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

As Horizon Hobby, Inc. 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.

### **Inspection or Repairs**

If your 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 Hobby, Inc. is not responsible for merchandise until it arrives and is accepted at our facility. Include your complete name, address, phone number where you can be reached during business days, RMA number, and a brief summary of the problem. Be sure your name, address, and RMA number are clearly written on the shipping carton.

# **Warranty Inspection and Repairs**

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Providing 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 and the expense exceeds 50% of the retail purchase cost, you will be provided with an estimate advising you of your options. You will be billed for any return freight for non-warranty repairs. Please advise us of your preferred method of payment. Horizon Hobby 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. Electronics and engines requiring inspection or repair should be shipped to the following address (freight prepaid):

Horizon Service Center 4105 Fieldstone Road Champaign, Illinois 61822

All other products requiring inspection or repair should be shipped to the following address (freight prepaid):

Horizon Product Support 4105 Fieldstone Road Champaign, Illinois 61822

#### **Aileron Servo Installation**

### **Required Parts**

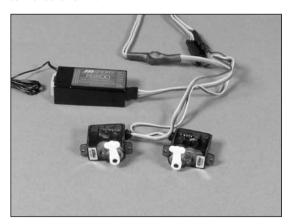
- Wing
- 4 1/2" (114mm) linkage w/clevis
- Pushrod connector assembly (2)
- Wiring decal
- 6" Y-harness
- 12" servo extension
- Servo (2)

#### Required Tools and Adhesives

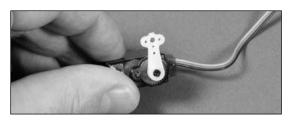
Drill

- Threadlock or thin CA
- 6-minute epoxy
- Side cutters
- Drill bit: 5/64" (2mm)
- Hex wrench: 1.5mm
- Hobby knife

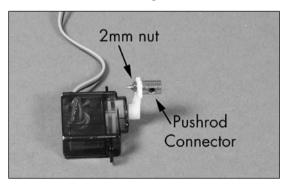
1. Plug a 6" Y-harness into the receiver. Plug the two aileron servos into the Y-harness. Turn on the radio system and center the trim and stick at the transmitter, ensure sub trims are at zero. Check the aileron servo operation. Reposition the servo arms if necessary so they are perpendicular to the servo as shown.



 ○ 2. Enlarge the outer hole in the servo arm using a 5/64" (2mm) drill.

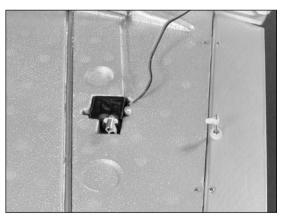


○ 3. Slide the pushrod connector into the hole.
Secure the connector using a 2mm nut.

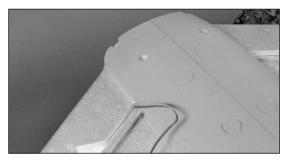


*Hint*: Use threadlock or a drop of thin CA on the nut to prevent it from loosening during flight.

○ 4. Mix a small drop of 6-minute epoxy and apply it onto the servo pocket. Press the servo into the pocket and allow the epoxy to cure before continuing to the next step.



○ 5. Attach a 12" (305mm) extension to the servo lead. Use a hobby knife to cut an opening at the center of the wing. Pass the extension through the hole and to the center of the wing.

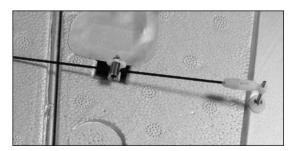




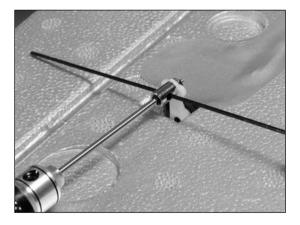
O O 6. Apply the wiring decal over the servo wiring from the engine pod over the servo.



○ 7. Slide the 4 1/2" (114mm) pushrod through the pushrod connector. Snap the clevis onto the aileron servo horn.

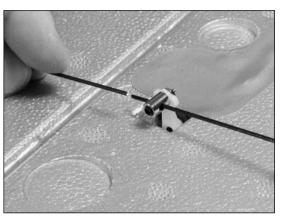


O 8. Plug the servo extension into the Y-harness and turn on the radio system. Center the aileron. Use a 3mm setscrew to secure the pushrod wire in the pushrod connector.



**Hint**: Use thread lock or a drop of thin CA on the set screw to prevent it from loosening in flight.

O 9. Use side cutters to remove the excess pushrod wire so it will not interfere with the wing while the servo is moving.



• 10. Repeat Steps 2 though 9 for the remaining aileron servo.

#### **Motor Installation**

### **Required Parts**

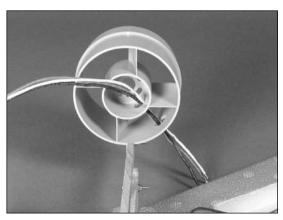
Wing

- Motor (2)
- Brushless speed control (2)
- 2mm x 6mm screw (4)
- Red wire, 25" (680mm) (2)
- Black wire, 25" (680mm) (2)
- Foam motor nacelle (right and left) (2)
- Wiring decal
- Heat shrink tubing: 1/4" (6mm)

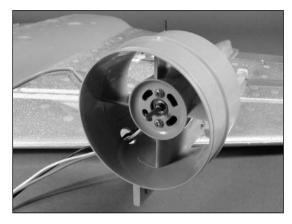
### **Required Tools and Adhesives**

- Phillips screwdriver Flat blade screwdriver
- Soldering iron
- 30-minute epoxy
- Hobby knife
- Solder
- Rubber bands
- Small round file
- Model clamps

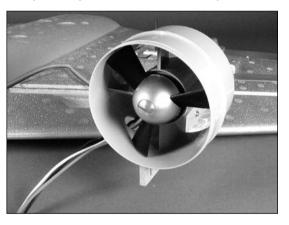
O 1. Route the motor wires through the pre-drilled holes in the fan housing.



○ 2. Position the motor in the fan housing. Use two 2mm x 6mm screws to secure the motor to the fan housing.

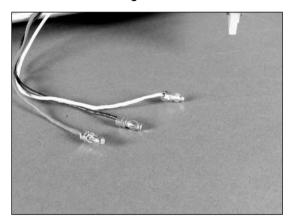


○ 3. Slide the fan onto the motor shaft. Tighten the screw in the front of the fan using a flat blade screwdriver. Make sure to position the fan so it will spin freely when the motor is in operation.

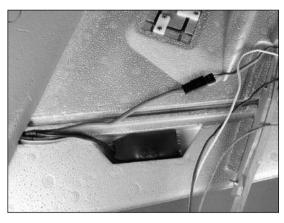


**Note**: You may need to enlarge the mount holes slightly to allow movement of the motor so the fan will spin freely when turned by hand. Use a small round file for this operation if needed.

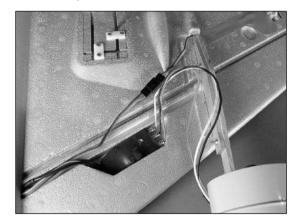
○ 4. Solder the appropriate connectors onto the motor wires. Solder the 25" (680mm) wire for the battery onto the speed control and protect with heat shrink tubing.



○ 5. Route the lead and battery wires from the speed control through the opening made in the aileron servo installation. Place the speed control into the opening in the wing.



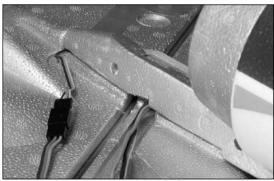
O 6. Solder a connector to the battery wires that matched your battery connector. Plug the speed control into the receiver. Plug the motor wires into the speed control. Use the radio system to check the operation of the motor. If the motor operates in the wrong direction follow the instructions to correct the problem.



**Note**: Use caution around the motor while testing the direction of the motor.

○ 7. Test fit the foam motor nacelle over the fan. Trim the foam using a hobby knife as necessary to route the motor wires back to the wire channel.

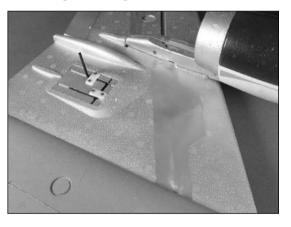




○ 8. Test fit the remaining foam nacelle to the fan. Use 30-minute epoxy to glue the foam fan nacelles to the fan and to the structure supporting the fan. Use rubber bands and clamps to hold the foam nacelles in position until the epoxy fully cures.



• 9. Tuck the wires neatly into the wire channels. Trim the foam if necessary to fit the connection between the servo and servo extension. Cover the wires using the wiring decal.



O 10. Repeat Steps 1 through 9 to install the second motor.

O 11. Run the motors at full throttle and look for any rubbing of the fan blades to the outer shroud. If any rubbing occurs, you can remove the fan rotor assembly and work the area with a rotary tool and a fine drum sander until all the black area is removed. Remove very little, maintaining the circumference of the shroud. Reinstall the fan rotor assembly and run again. There should be no rubbing at all during operation.



### **Landing Gear Installation**

### **Required Parts**

Wing

Fuselage

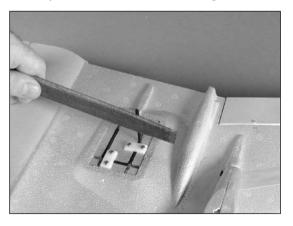
Servo

- 12" servo extension
- Main gear assembly (2)
- Nose gear assembly
- 2mm x 8mm sheet metal screw
- 1/2" x 3/8" x 3/8" (13mm x 9.5mm x 9.5mm) servo mounting block (2)

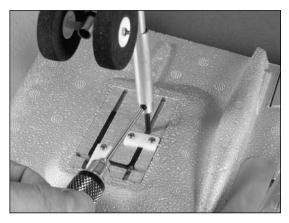
#### Required Tools and Adhesives

- 1.5mm hex wrench File
- 6-minute epoxy
- Pencil
- Threadlock
- Hobby knife
- Medium CA

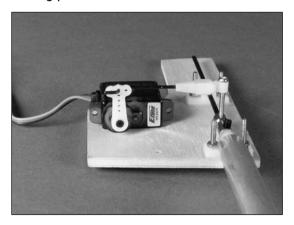
○ 1. Loosen the setscrew in the main landing gear assembly. Slide the gear onto the landing gear wire. Position the gear parallel to the wing centerline and tighten the setscrew enough to leave a mark on the landing gear strut. Remove the gear and file a flat spot on the landing gear strut to prevent the wire from rotating on the wire.



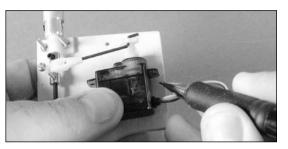
O 2. Apply a small amount of threadlock onto the setscrew. Tighten the setscrew onto the landing gear wire.



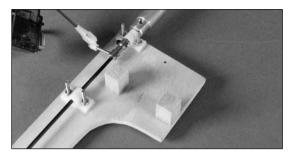
3. Repeat Steps 1 and 2 for the remaining main landing gear assembly. • 4. Plug the steering servo into the rudder channel of the receiver. Center the trims and sub trim on the radio and position the servo arm on the steering servo perpendicular to the servo. Enlarge the outer hole of the servo arm using a 1/16" (1.5mm) drill bit. Attach the "Z" bend of the steering pushrod into the hole.



O 5. Position the servo so the wheels are parallel to the plywood mounting plate. Use a pencil to mark the location of the servo onto the plate.

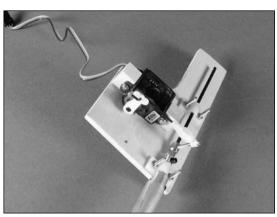


O 6. Use medium CA to glue the two 1/2" x 3/8" x 3/8" (13mm x 9.5mm x 9.5mm) servo mounting blocks onto the mounting plate.

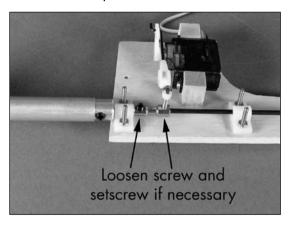


**Note**: The mounting blocks must be on the mounting plate. If the block is not on the plate, simply reposition the servo and mark the position for the blocks so they are both completely on the mounting plate.

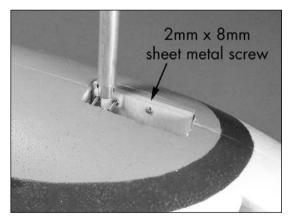
7. Use the hardware provided with the servo to attach it to the mounting blocks.



O 8. Turn the radio on and double-check that the wheels are parallel to the mounting plate. If not, simply loosen the screw and setscrew so the wheels can be repositioned.



9. Attach a 12" servo extension to the steering servo. Slide the mounting plate into the fuselage.
Use a 2mm x 8mm sheet metal screw to secure the plate into the fuselage.



#### **Elevator Servo Installation**

#### **Required Parts**

Fuselage

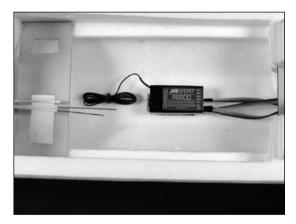
- Pushrod connector assembly (2)
- ServoReceiver
- Y-harness
- Hook and loop

#### Required Tools and Adhesives

Drill

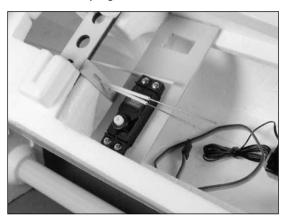
- Drill bit: 5/64" (2mm)
- Threadlock
- Medium CA
- 1.5mm hex wrench

1. Use hook and loop to attach the receiver inside the fuselage. Plug a 6" Y-harness into the rudder channel of the receiver. Plug the steering servo into one lead from the Y-harness.

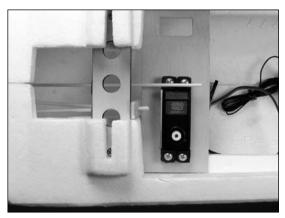


**Note**: At this time there will be a 6" Y-harness plugged into the rudder, throttle and aileron channels of the receiver.

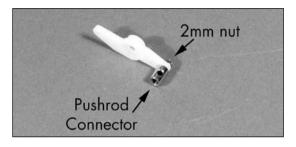
2. Install the grommets and brass eyelets into the elevator servo. Mount the elevator servo into the fuse, and then plug the servo into the receiver.



○ 3. Disconnect the clevises from the elevator horn and pull the pushrod wires partially out of the pushrod tubes. Use side cutters to trim the pushrod tubes roughly 1/4" (6mm) ahead of the pushrod support tube.



Q 4. Drill the outer hole in a servo arm using a 5/64" (2mm) drill bit. Attach the pushrod connector to the servo arm using a 2mm nut and threadlock.



O 5. Turn the radio system on and attach the servo arm to the elevator servo, center the elevator trim, and ensure the sub trim is zero.



O 6. Slide the elevator pushrod wires through the pushrod connector. Center the elevators and secure the wires using the 3mm setscrew.



O 7. Use medium CA to glue the pushrod tubes to the pushrod tube support.

### **Rudder Installation**

### **Required Parts**

Fuselage

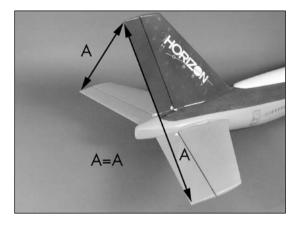
- Pushrod connector assembly (2)
- Rudder w/fin
- Servo

### Required Tools and Adhesives

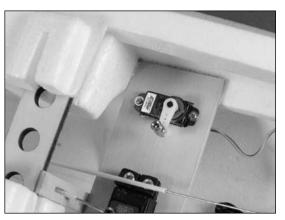
Ruler

- Drill
- 6-minute epoxy
- Drill bit: 5/64" (2mm)
- 1.5mm hex wrench

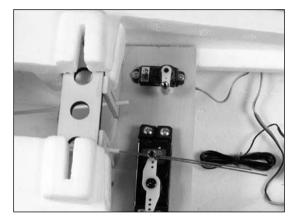
O 1. Position the rudder into the slot on the top of the fuselage. Measure from the tip of the rudder to each stabilizer tip to make sure the measurements are equal. If not, lightly sand the bottom of the rudder to position it evenly.



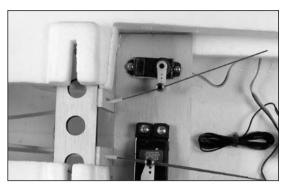
Q 2. Use 6-minue epoxy to glue the rudder into the fuselage. Allow the epoxy to fully cure before continuing. 3. Enlarge the outer hole of the rudder servo arm using a 5/64" (2mm) drill bit. Attach the pushrod connector to the servo horn. Install the servo into the fuselage then attach the servo horn after centering the rudder servo.



• 4. Slide the pushrod support onto the pushrod. Use medium CA to glue the tube in position against the rear wing bolt plate and the servo tray. With the pushrod wire pulled partially out of the tube, trim the pushrod tube around 1/4" (6mm) in front of the pushrod tube support.



O 5. Slide the pushrod wire through the pushrod connector. Center the rudder and rudder servo. Secure the wire using a 3mm setscrew.



- O 6. Use medium CA to glue the pushrod tube to the pushrod tube support.
- 7. Complete the radio installation by routing the antenna wire to the rear of the fuselage. Do not cut the antenna as it will greatly reduce the range of your radio system.

### **Final Assembly**

### **Required Parts**

- Fuselage Wing
- 3mm x 40mm screw (4)
- 3mm washer Li-Po battery (2)

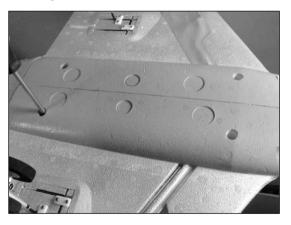
### Required Tools and Adhesives

- Hook and loop strap
- Phillips screwdriver

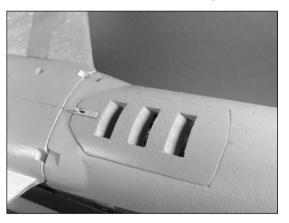
1. Remove the cover from the battery opening. Place the motor batteries into the fuselage. Use a piece of hook and loop between the two batteries as well as between the battery and battery tray to keep them from sliding on the tray. Secure the two batteries using the hook and loop strap.



2. Attach the wing to the fuselage using four 3mm x 40mm screws and four 3mm washers. Remember to plug in the aileron and speed controls before installing the screws.



3. Plug the speed controls into the batteries. Each battery will plug into its own individual speed control. Once the batteries have been plugged in, install the hatch back onto the fuselage.

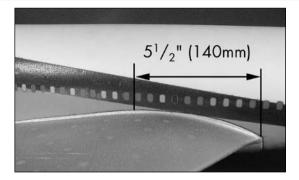


### **Center of Gravity / Battery Installation**

An important part of preparing the aircraft for flight is properly balancing the model.

#### Caution: Do not inadvertently skip this step!

The recommended Center of Gravity (CG) location for your Airliner is  $5^{1}/_{2}$ " (140mm) back from the leading edge against the fuselage. The Center of Gravity position has been marked on the bottom of the wing, although the plane will be balanced inverted.



The battery packs can be moved forward or rearward to achieve the correct balance. Make a mark on the battery tray so you know the correct position of the batteries when they are replaced after charging.

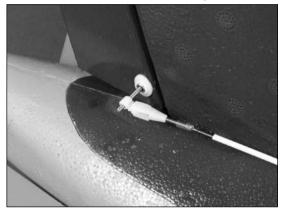
#### **Control Throws**

The amount of control throw should be adjusted as closely as possible using mechanical means, rather than making large changes electronically at the radio. By moving the position of the clevis at the control horn toward the outermost hole, you will decrease the amount of control throw of the control surface. Moving it toward the control surface will increase the amount of throw. Moving the pushrod wire at the servo arm will have the opposite effect: Moving it closer to center will decrease throw, and away from center will increase throw. Work with a combination of the two to achieve the closest or exact control throws listed.

	High Rate	Low Rate
Aileron	3/4" up	1/2" up
	3/4" down	1/2" down
Aileron Expo	25%	10%
Elevator	1 ¹/ <sub>8</sub> " up	7/8" up
	1 ¹/ <sub>8</sub> " down	7/8" down
Elevator Expo	25%	15%
n II	2/40 - 1.	1 /0" :   .
Rudder	3/4" right	1/2" right
D	3/4" left 25%	1/2" left
Rudder Expo	23%	1 <i>5</i> %

**Note**: The throws listed are a good starting point for most flight conditions.

Once the control throws have been set, slide the clevis retainers onto the clevises to secure their positions.



# Flying the Super Airliner

With batteries charged and hooked up, check all control surfaces for correct throws and directions. Verify both fan units turn in the correct direction as well. Set your transmitter timer for 8 minutes and start this just before takeoff. With the model sitting on the runway, move the throttle trim up until the fans just come to life. This is the flight idle which you will want to maintain during flight. This will give the Super Airliner the best glide ratio possible. If the fan units stop turning, there will be a higher level of drag; the Airliner can still be flown but with a shorter glide ratio. There is no need for concern, just good information for your first jet flight.

Apply power smoothly and steer straight with rudder control. Apply half to three-quarter up elevator during the takeoff roll. The airliner will rotate when it is ready. This is routinely at approximately 100–150 feet. Establish a climb out at approximately 20–30 degrees, and make your turn out. It is common to be at 150 feet of altitude as you cross by on the downwind leg.

Your Super Airliner is capable of the basic aerobatic maneuvers such as loops, rolls, and inverted flight. Use full throttle during all maneuvers. The Super Airliner will cruise around effortlessly at 1/2 to 5/8 throttle for extended flights. Touch and go's are easily accomplished at any time

during the flight. You will find you will need to use more stick throw during basic and aerobatic flight than you will with a propeller-driven model. This is due to the lack of prop blast on the flight controls.

An engine out situation with the Airliner is not a bad thing. The best thing to do is to reduce power and set up for a landing. This is almost unheard of with an electric power system, but if a motor or speed control fails, the Super Airliner can be flown back to a landing on one engine. We have flown it on one motor and made turns both into and away from the dead engine. This is possible, just not enjoyable flying.

Landing is accomplished by setting up on the downwind leg and reducing power to 1/4. Fly through the base leg turn and onto final, reducing power a click at a time to establish a glide slope. With the fan units idling, you may reduce power to idle and float the Super Airliner in for a smooth touchdown whenever you feel comfortable. The Super Airliner glides very well in calm weather and is very controllable to touchdown. The shock absorbing landing gear makes every landing look like it was done by a pro. We hope you enjoy the Super Airliner in the air as much as we do. Welcome to the world of Jet Flight.

# 2006 Official AMA National Model Aircraft Safety Code

#### **GENERAL**

- 1) I will not fly my model aircraft in sanctioned events, air shows or model flying demonstrations until it has been proven to be airworthy by having been previously, successfully flight tested.
- 2) I will not fly my model higher than approximately 400 feet within 3 miles of an airport without notifying the airport operator. I will give right-of-way and avoid flying in the proximity of full-scale aircraft. Where necessary, an observer shall be utilized to supervise flying to avoid having models fly in the proximity of full-scale aircraft.
- 3) Where established, I will abide by the safety rules for the flying site I use, and I will not willfully or deliberately fly my models in a careless, reckless and/or dangerous manner.
- 4) The maximum takeoff weight of a model is 55 pounds, except models flown under Experimental Aircraft rules.

- 5) I will not fly my model unless it is identified with my name and address or AMA number on or in the model. (This does not apply to models while being flown indoors.)
- 6) I will not operate models with metal-bladed propellers or with gaseous boosts, in which gases other than air enter their internal combustion engine(s); nor will I operate models with extremely hazardous fuels such as those containing tetranitromethane or hydrazine.

#### RADIO CONTROL

- 1) I will have completed a successful radio equipment ground range check before the first flight of a new or repaired model.
- 2) I will not fly my model aircraft in the presence of spectators until I become a qualified flier, unless assisted by an experienced helper.
- 3) At all flying sites a straight or curved line(s) must be established in front of which all flying takes place with the other side for spectators. Only personnel involved with flying the aircraft are allowed at or in front of the flight line. Intentional flying behind the flight line is prohibited.

# 2006 Official AMA National Model Aircraft Safety Code

- 4) I will operate my model using only radio control frequencies currently allowed by the Federal Communications Commission. (Only properly licensed Amateurs are authorized to operate equipment on Amateur Band frequencies.)
- 5) Flying sites separated by three miles or more are considered safe from site-to-site interference, even when both sites use the same frequencies. Any circumstances under three miles separation require a frequency management arrangement, which may be either an allocation of specific frequencies for each site or testing to determine that freedom from interference exists. Allocation plans or interference test reports shall be signed by the parties involved and provided to AMA Headquarters.
- Documents of agreement and reports may exist between (1) two or more AMA Chartered Clubs, (2) AMA clubs and individual AMA members not associated with AMA Clubs, or (3) two or more individual AMA members
- 6) For Combat, distance between combat engagement line and spectator line will be 500 feet per cubic inch of engine displacement. (Example: .40 engine = 200 feet.); electric motors will be based on equivalent combustion engine size. Additional safety requirements will be per the RC Combat section of the current Competition Regulations.
- 7) At air shows or model flying demonstrations, a single straight line must be established, one side of which is for flying, with the other side for spectators.
- 8) With the exception of events flown under AMA Competition rules, after launch, except for pilots or helpers being used, no powered model may be flown closer than 25 feet to any person.
- 9) Under no circumstances may a pilot or other person touch a powered model in flight.





© 2006 Horizon Hobby, Inc. 4105 Fieldstone Road Champaign, Illinois 61822 (877) 504-0233 www.horizonhobby.com www.E-fliteRC.com