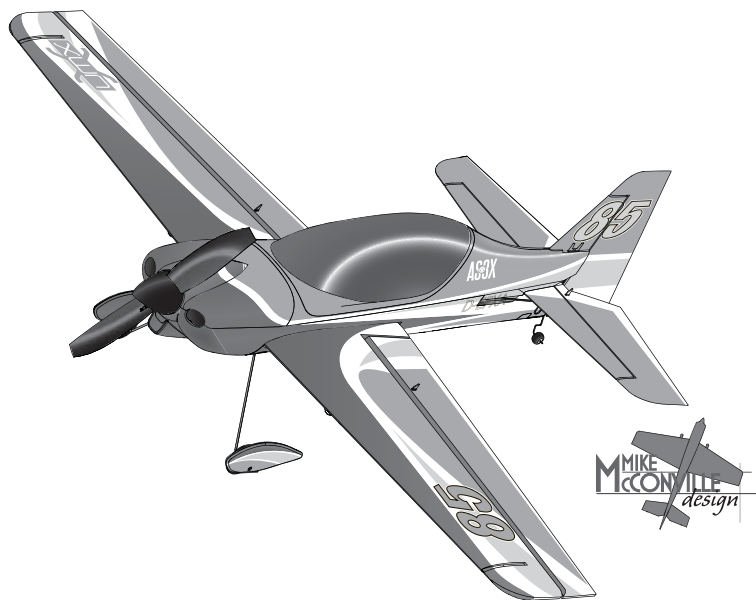


**BNF**<sup>™</sup>  
BASIC

# UMX<sup>™</sup> Sbach<sup>®</sup> 342 3D



***Instruction Manual***  
***Bedienungsanleitung***  
***Manuel d'utilisation***  
***Manuale di Istruzioni***

**AS3X**

**E-flite<sup>®</sup>**  
ADVANCING ELECTRIC FLIGHT

**NOTICE**

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up-to-date product literature, visit [www.horizonhobby.com](http://www.horizonhobby.com) and click on the support tab for this product.


**Meaning of Special Language:**

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

**NOTICE:** Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

**CAUTION:** Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

**WARNING:** Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

 **WARNING:** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product. 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. Do not attempt disassembly, use with incompatible components or augment product in any way without the approval of Horizon Hobby, Inc. This 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 serious injury.

**Age Recommendation: Not for children under 14 years. This is not a toy.**

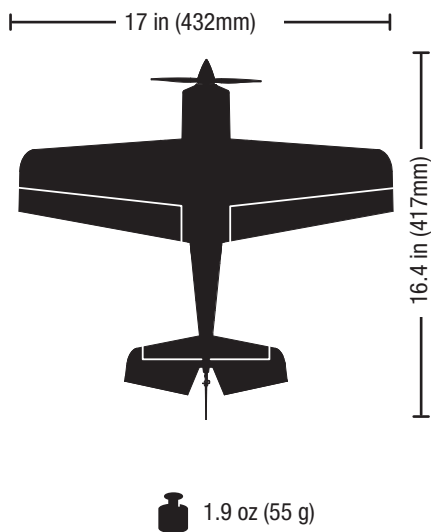
Thank you for purchasing the *E-flite*<sup>®</sup> *UMX*<sup>™</sup> *Sbach*<sup>®</sup> 342 3D. Designed by world-class competition pilot and designer Mike McConville, this 4-channel, scale aerobatic monoplane is going to thrill you, especially if your interest is flying extreme precision aerobatics and 3D maneuvers in a park or a large backyard. Its 2S Li-Po, 2500Kv brushless power system is one of the most powerful ever developed for an aircraft this small. And although its phenomenal power-to-weight ratio is a big reason the *UMX Sbach 342 3D* flies better than a typical ultra micro, what will truly be amazing is how much the *UMX Sbach 342 3D* performs like an expertly tuned giant-scale airplane. Thanks to its *AS3X*<sup>®</sup> electronic enhancement system, you will be capable of flying precision aerobatic and 3D maneuvers with a greatly amplified sense of authority and stability, even in moderately windy conditions.

The exceptional capabilities of the *UMX Sbach 342 3D* may require a little more first-flight preparation than you may be used to with other *Bind-N-Fly*<sup>®</sup> ultra micro aircraft. Please be sure to read through this manual carefully so that you are equipped to successfully enjoy all the benefits this outstanding ultra micro model has to offer.

## Table of Contents

Specifications .....	3	Optional – Installation of Side Force Generators (SFGs) .....	8
AS3X Stabilization Delivers Breakthrough		Flying Tips and Repairs .....	8
Performance .....	4	Additional Safety Precautions and Warnings .....	9
Preflight Checklist .....	4	Post Flight Checklist .....	9
Low Voltage Cutoff (LVC) .....	4	Service of Power Components .....	10
Transmitter and Receiver Binding .....	5	Troubleshooting Guide .....	11
Installing the Flight Battery .....	5	Limited Warranty .....	12
Arming the ESC .....	6	Warranty and Service Information .....	14
Control Direction Test .....	6	Compliance Information for the European Union ..	14
Control Centering .....	6	Replacement Parts .....	54
Settings for Control Horns .....	7	Optional Parts and Accessories .....	55
Dual Rates .....	7	Parts Contact Information .....	55
Adjusting Center of Gravity (CG) .....	7		




## Specifications



### Installed

-  DSM2 6Ch Ultra Micro AS3X Spektrum Receiver (SPMAS6410NBL)
-  BL180 Brushless Outrunner Motor, 2500Kv (EFLUM180BL2)
-  (4) 2.3 g Performance Linear Long Throw Servo (SPMSA2030L)

### Needed to Complete

-  **Battery:** 180mAh 2S 20C Li-Po (EFLUB1802S20)
-  **Battery Charger:** 2S 7.4V Li-Po (EFLUC1007)
-  **Recommended Transmitter:** Spektrum<sup>™</sup> DSM2<sup>®</sup>/DSMX<sup>®</sup> full range with dual-rates (DX4e and up)

To register your product online, go to [www.e-fliterc.com](http://www.e-fliterc.com)

## AS3X Stabilization Delivers Breakthrough Performance

Horizon Hobby has always made RC sport, scale and unique aircraft with the kind of performance experts appreciate. Now the exclusive Artificial Stability – 3 aXis (AS3X) system helps take performance expectations in ultra micro aircraft a quantum leap higher.

Based on the successful use of MEMS sensor technology within the AS3X Stabilization System essential to Blade® ultra micro flybarless helicopters, the specifically tuned AS3X System for airplanes helps invisibly correct for turbulence, torque and tip stalls when encountered.

Furthermore, the outstanding control agility delivers an ultra smooth, locked-in feel that obeys your every command with performance that's natural feeling. It's so gratifying, in fact, that it's as though you're the RC pilot of an expertly tuned, giant-scale aircraft.

AS3X will change the way you'll want to fly now and in the future. To see what we mean, go to [www.E-fliteRC.com/AS3X](http://www.E-fliteRC.com/AS3X).

## Preflight Checklist

✓	
	1. Charge flight battery.
	2. Install flight battery in the aircraft (once it has been fully charged).
	3. Bind aircraft to your transmitter.
	4. Make sure linkages move freely.
	5. Perform Control Direction Test with the transmitter.

✓	
	6. Set dual rates
	7. Adjust center of gravity.
	8. Perform a radio system Range Check.
	9. Find a safe and open area.
	10. Plan flight for flying field conditions.

## Low Voltage Cutoff (LVC)

When a Li-Po battery is discharged below 3V per cell, it will not hold a charge. The aircraft's ESC protects the flight battery from over-discharge using Low Voltage Cutoff (LVC). Before the battery charge decreases too much, LVC removes power supplied to the motor. Power to the motor quickly decreases and increases, showing that some battery power is reserved for flight control and safe landing.

When the motor power pulses, land the aircraft immediately and recharge the flight battery.

Disconnect and remove the Li-Po battery from the aircraft after use to prevent trickle discharge. Fully charge your Li-Po battery before storing it. During

storage, make sure battery charge does not fall below 3V per cell.

**Tip:** Due to the quiet nature of the aircraft, you may not hear the pulsing of the motor.

For your first flights, set your transmitter timer or a stopwatch to 5 minutes. Adjust your timer for longer or shorter flights once you have flown the aircraft.

Flights of 6 minutes or more are achievable if using proper throttle management.

**NOTICE:** Repeated flying to LVC will damage the battery.

## Transmitter and Receiver Binding

Binding is the process of programming the receiver of the control unit to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. You need to 'bind' your chosen Spektrum™ DSM2® / DSMX® technology equipped aircraft transmitter to the receiver for proper operation.

Any JR® or Spektrum DSM2/DSMX transmitter can bind to the SPMAS6410NBL receiver. Due to the aerobatic capabilities of the UMX Sbach 3D, it is highly recommended that you use a transmitter with dual rates. Please visit [www.bindnfly.com](http://www.bindnfly.com) for a complete list of compatible transmitters.

**⚠ CAUTION:** When using a Futaba transmitter with a Spektrum DSM module, you must reverse the throttle channel and rebind. Refer to your Spektrum module manual for binding and failsafe instructions. Refer to your Futaba transmitter manual for instructions on reversing the throttle channel.

### ✓ Binding Procedure

1.	Refer to your transmitter's unique instructions for binding to a receiver.
2.	Make sure the flight battery is disconnected from the aircraft.
3.	Power off your transmitter.
4.	Connect the flight battery in the aircraft. The receiver LED will begin to flash rapidly (typically after 5 seconds).
5.	Make sure transmitter controls are neutral and throttle and throttle trim are in low position.
6.	Put your transmitter into bind mode. Refer to your transmitter's manual for binding button or switch instructions.
7.	After 5 to 10 seconds, the receiver status LED will become solid, indicating that the receiver is bound to the transmitter. If the LED does not turn solid, refer to the Troubleshooting Guide at the back of the manual.

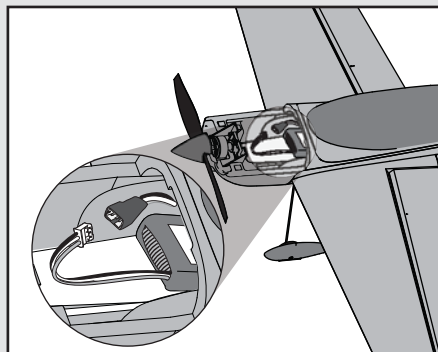
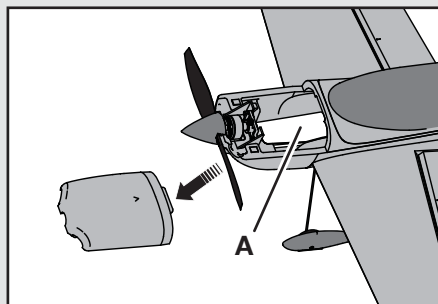
For subsequent flights, power on the transmitter for 5 seconds before connecting the flight battery.

## Installing the Flight Battery

1. Remove the battery hatch from the nose of the aircraft and power on your transmitter.
2. Attach the flight battery to the hook and loop strip (A) on the battery tray. See the Adjusting the Center of Gravity instructions to determine the battery position for your desired flying style.
3. Place the aircraft on the ground out of the wind and connect a fully charged flight battery. Ensure the aircraft is immobile for 5 seconds so the AS3X system initializes correctly. See the Arming the ESC instructions for correct connection of the battery to the ESC.
4. Install the battery hatch.


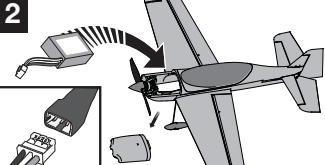
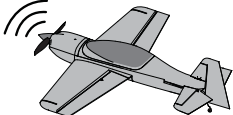
**NOTICE:** If using a different battery than the recommended 2-Cell 7.4V 180mAh 20C Li-Po, you will need to apply a circle of hook and loop fastener to the back of the battery, opposite the side with the label, in order to hold the battery in place.

**⚠ CAUTION:** Always disconnect the Li-Po battery from the aircraft receiver when not flying to avoid over-discharging the battery. Batteries discharged to a voltage lower than the lowest approved voltage may become damaged, resulting in loss of performance and potential fire when batteries are charged.



## Arming the ESC

Arming the ESC also occurs after binding as previously described, but subsequent connection of a flight battery requires the steps below.

		
<p>1 Lower throttle and throttle trim to lowest settings.</p> <p>⚡ Power on the Transmitter, then wait 5 seconds.</p>	<p>2 Install the flight battery and connect it to the ESC.</p>	<p>3 Keep the aircraft immobile on its wheels away from wind for five seconds.</p> <ul style="list-style-type: none"> <li>🔊 Series of tones</li> <li>💡 Continuous LED</li> </ul>

If you accidentally connect the battery while the throttle is fully raised, the ESC will enter programming mode. Disconnect the battery immediately.

The AS3X system will not activate until the throttle stick or trim is increased for the first time. Once the AS3X is active, the control surfaces may move rapidly on the aircraft. This is normal.

AS3X will remain active until the battery is disconnected.

**⚠ CAUTION:** Always keep hands away from the propeller. When armed, the motor will turn the propeller in response to any throttle movement.

## Control Direction Test

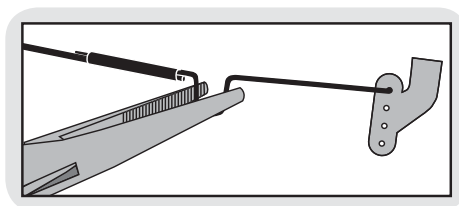
You should bind your aircraft and transmitter before doing these tests. Move the controls on the transmitter to make sure the aircraft control surfaces move correctly and in the proper direction.

Make sure all linkages move freely and that paint or decals are not adhered to them.

## Control Centering

**Before the first flights, or in the event of an accident, make sure the flight control surfaces are centered.** Adjust the linkages mechanically if the control surfaces are not centered. Use of the transmitter sub-trims may not correctly center the aircraft control surfaces due to the mechanical limits of linear servos.

1. Make sure the control surfaces are neutral when the transmitter controls and trims are centered. The transmitter sub-trim must always be set to zero.
2. When needed, use a pair of pliers to carefully bend the metal linkage (see illustration).
3. Make the U-shape narrower to make the connector shorter. Make the U-shape wider to make the linkage longer.



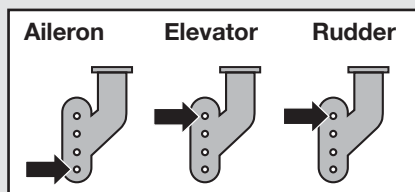
### Centering Controls After First Flights

**For best performance with AS3X, it is important that excessive trim is not used.** If the aircraft requires excessive transmitter trim (4 or more clicks of trim per channel), return the transmitter trim to zero and adjust the linkages mechanically so that the control surfaces are in the flight trimmed position.

## Settings for Control Horns

The illustration shows linkage positions chosen for the most balanced aerobatic response. Linkage connections on the control horns directly affect aircraft response.

**CAUTION:** When these are incorrectly connected for the pilot's skill level, unexpected aircraft response to controls can result. This can cause damage to the aircraft and personal injury.



## Dual Rates

To obtain the best flight performance, we recommend using a DSM2/DSMX radio capable of Dual Rates. The suggested settings shown here are the recommended starting settings. Adjust according to the individual preferences after the initial flight.

**NOTICE: Do not set your transmitter travel adjust over 100%.** If the TRAVEL ADJUST is set over 100%, it will not result in more control movement, it will overdrive the servo and cause damage.

	High Rate	Low Rate
Aileron	100%	70%
Elevator	100%	70%
Rudder	100%	70%

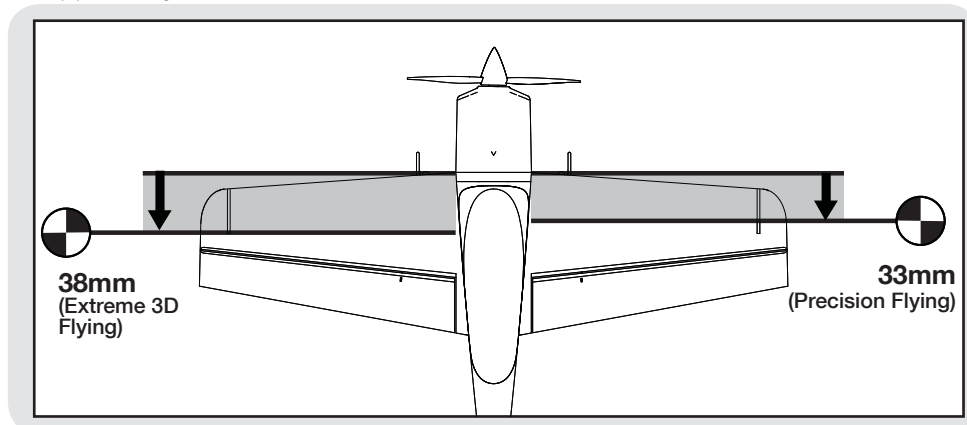
It is normal for linear servos to make significant noise. The noise is not an indication of a faulty servo.

## Adjusting Center of Gravity (CG)

The CG location is measured from the leading edge of the wing at the root. This CG location has been determined with the 2S 180mAh 7.4V Li-Po battery installed.

Start by placing the front edge of the battery aligned with or slightly forward of the rear edge of the cowl. The Li-Po battery can be positioned to accommodate your desired flying style by using the battery positioning chart as shown.

Flying Type	CG	Battery position
Precision Flying	33mm	Align the front of the battery 20mm forward from the rear edge of the cowl.
Extreme 3D Flying	38mm	Align the front of the battery with the rear edge of the cowl.

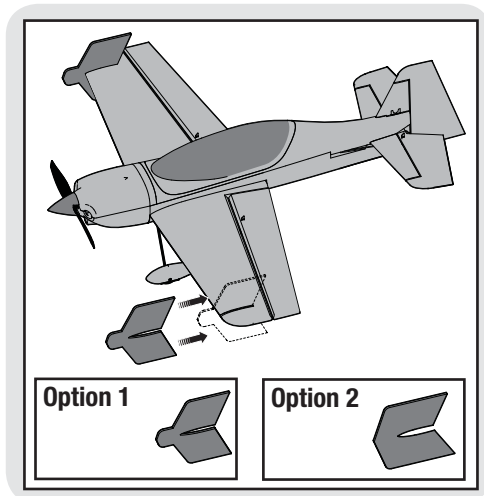


## Optional – Installation of Side Force Generators (SFGs)

Side Force Generators™ add side force in all flight attitudes, increase rudder authority and make a variety of acrobatics possible.

The two SFG sets included with the aircraft provide different amounts of increased rudder control. We recommend first flying the aircraft without the SFGs, then with each set of SFGs to determine what is best for your flying style. SFGs shown in **Option 1** provide enhanced rudder authority, while SFGs in **Option 2** provide extreme rudder authority.

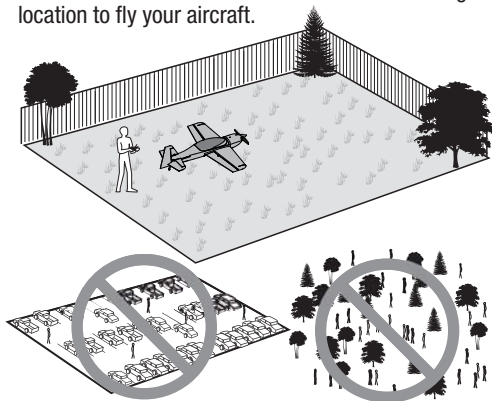
Slide the SFG on to the leading edge of the wing. Apply a few drops of foam-safe CA to stabilize the SFGs on the wings and to prevent them from moving in flight.



## Flying Tips and Repairs

### Flying

We recommend flying your aircraft outside in no greater than moderate winds, or indoors in a large gymnasium. Always avoid flying near houses, trees, wires and buildings. You should also be careful to avoid flying in areas where there are many people, such as busy parks, schoolyards or soccer fields. Consult local laws and ordinances before choosing a location to fly your aircraft.



### Takeoff

Place the aircraft in position for takeoff (facing into the wind if flying outdoors). Set dual rates to low position and gradually increase the throttle to  $\frac{3}{4}$  to full and steer with the rudder. Pull back gently on the elevator and climb to check trim. Once the trim is adjusted, begin exploring the flight envelope of the aircraft.

Failure to lower the throttle stick and trim to the lowest possible positions during a crash could result in damage to the ESC in the receiver unit, which may require replacement.

The Sbach 3D is equipped with Over Current Protection (OCP). This feature protects the ESC from overheating. OCP stops the motor when the transmitter throttle is set too high and the propeller cannot turn. The OCP will only activate when the throttle stick is positioned just above  $\frac{1}{2}$  throttle. After the ESC stops the motor, fully lower the throttle to re-arm the ESC.

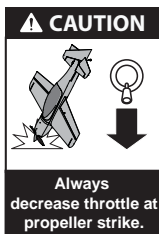
**NOTICE:** Crash damage is not covered under the warranty.

### Repairs

Repair the aircraft using foam-compatible CA (cyanoacrylate adhesive) or clear tape. Only use foam-compatible CA, as other types of glue can damage the foam. When parts are not repairable, see the Replacement Parts List for ordering by item number.

For a listing of all replacement and optional parts, refer to the list at the end of this manual.

**NOTICE:** Use of foam-compatible CA accelerant on your aircraft can damage paint. DO NOT handle aircraft until accelerant fully dries.





## Additional Safety Precautions and Warnings

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- Always keep a safe distance in all direction around your model to avoid collisions or injury.
- This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.
- Always keep aircraft in sight and under control.
- Always use fully charged batteries.
- Always keep transmitter powered on while aircraft is powered.
- Always remove batteries before disassembly.
- Always keep moving parts clean.
- Always keep parts dry.
- Always let parts cool after use before touching.
- Always remove batteries after use.
- Always ensure failsafe is properly set before flying.
- Never operate aircraft with damaged wiring.
- Never touch moving parts.

## Post Flight Checklist

✓	
	1. Disconnect flight battery from ESC (Required for Safety and battery life).
	2. Power off transmitter.
	3. Remove flight battery from aircraft.
	4. Recharge flight battery.

✓	
	5. Store flight battery apart from aircraft and monitor the battery charge.
	6. Make note of flight conditions and flight plan results, planning for future flights.

# Service of Power Components

## Disassembly

**⚠ CAUTION:** DO NOT handle propeller parts while the flight battery is connected. Personal injury could result.

### Propeller

1. Remove the battery hatch by gripping the front of the hatch, then pulling it up and away from the fuselage.
2. Remove the spinner (A) from the propeller (B).  
Since the propeller and spinner are glued together, glue residue will need to be cleaned from the spinner or propeller when these parts are used again.
3. Carefully remove the screw (C) and propeller (B) from the motor shaft (D).

A propeller spacer is installed on the motor shaft. Take care to not lose the spacer; it is needed to correctly install the propeller.

### Motor and Firewall

1. Remove 2 screws (E), the firewall (F) and motor (G) from the fuselage motor mount (H).
2. Remove the top screw (I) from the firewall (F) and motor (G).
3. Disconnect the motor wire connector from the ESC/receiver connector.

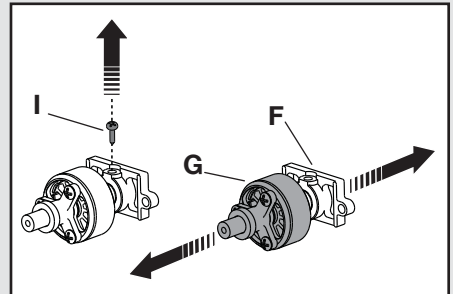
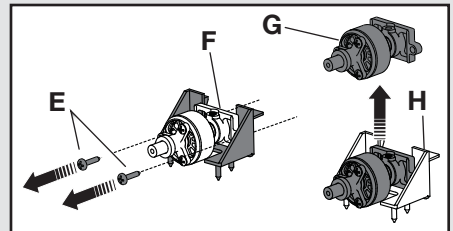
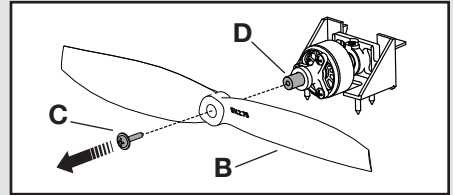
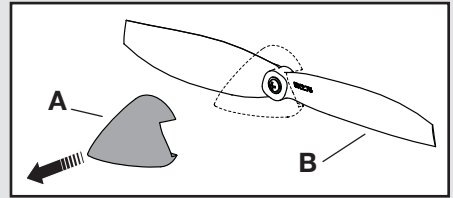
## Assembly

### Motor and Firewall

1. Connect the motor wire connector to the ESC/receiver connector so the wire colors align.
2. Install the motor in the firewall using a screw in the top of the firewall.
3. Attach the firewall to the fuselage motor mount using 2 screws.

### Propeller

1. Install the propeller on the motor shaft using a screw. The numbers on the propeller must face out from the fuselage for correct propeller operation.
2. Center and install the spinner on the propeller using foam-compatible CA.
3. Put the foam battery hatch on the fuselage and slide it back to fully engage the fuselage.



When the fuselage must be opened for access to servos or receiver, cut the tape or decals to open the canopy hatch.

Removing tape or decals may remove paint from the fuselage.

# Troubleshooting Guide

## AS3X

Problem	Possible Cause	Solution
Control surfaces not at neutral position when transmitter controls are at neutral	Control surfaces may not have been mechanically centered from factory	Center control surfaces mechanically by adjusting the U-bends on control linkages
	Aircraft was moved after the flight battery was connected and before sensors initialized	Disconnect and reconnect the flight battery while keeping the aircraft still for 5 seconds
Model flies inconsistently from flight to flight	Trims are moved too far from neutral position	Neutralize trims and mechanically adjust linkages to center control surfaces
Controls oscillate in flight, (model rapidly jumps or moves)	Propeller is unbalanced, causing excessive vibration	Remove propeller and rebalance or replace it if damaged
	Prop screw is too loose, causing vibration	Tighten the prop screw

Problem	Possible Cause	Solution
Aircraft will not respond to throttle but responds to other controls	Throttle stick and/or throttle trim too high	Reset controls with throttle stick and throttle trim at lowest setting
	Throttle channel is reversed	Reverse throttle channel on transmitter
	Motor disconnected from receiver	Open fuselage and make sure motor is connected to the receiver
Extra propeller noise or extra vibration	Damaged propeller, spinner or motor	Replace damaged parts
	Prop screw is too loose	Tighten the prop screw
	Prop is out of balance	Remove and balance propeller, or replace with a balanced propeller.
Reduced flight time or aircraft underpowered	Flight battery charge is low	Completely recharge flight battery
	Propeller installed backwards	Install propeller with numbers facing forward
	Flight battery damaged	Replace flight battery and follow flight battery instructions
	Flight conditions may be too cold	Make sure battery is warm before use
	Battery capacity too low for flight conditions	Replace battery or use a larger capacity battery
LED on receiver flashes and aircraft will not bind to transmitter (during binding)	Transmitter too near aircraft during binding process	Power off transmitter, move transmitter a larger distance from aircraft, disconnect and reconnect flight battery to aircraft and follow binding instructions
	Bind switch or button not held long enough during bind process	Power off transmitter and repeat bind process. Hold transmitter bind button or switch until receiver is bound
	Aircraft or transmitter is too close to large metal object, wireless source or another transmitter	Move aircraft and transmitter to another location and attempt binding again

## Troubleshooting Guide (Continued)

Problem	Possible Cause	Solution
LED on receiver flashes rapidly and aircraft will not respond to transmitter (after binding)	Less than a 5-second wait between first powering on transmitter and connecting flight battery to aircraft	Leaving transmitter on, disconnect and reconnect flight battery to aircraft
	Aircraft bound to different model memory (ModelMatch™ radios only)	Select correct model memory on transmitter and disconnect and reconnect flight battery to aircraft
	Flight battery/transmitter battery charge is too low	Replace/recharge batteries
	Transmitter may have been bound to a different model (or with a different DSM Protocol)	Select the right transmitter or bind to the new one
	Aircraft or transmitter is too close to large metal object, wireless source or another transmitter	Move aircraft and transmitter to another location and attempt linking again
Control surface does not move	Control surface, control horn, linkage or servo damage	Replace or repair damaged parts and adjust controls
	Wire damaged or connections loose	Do a check of wires and connections, connect or replace as needed
	Flight battery charge is low	Fully recharge flight battery
	Control linkage does not move freely	Make sure control linkage moves freely
Controls reversed	Transmitter settings reversed	Adjust controls on transmitter appropriately
Motor loses power	Damage to motor or power components	Do a check of motor and power components for damage (replace as needed)
Motor power quickly decreases and increases then motor loses power	Battery power is down to the point of receiver/ESC Low Voltage Cutoff (LVC)	Recharge flight battery or replace battery that is no longer performing
Motor/ESC is not armed after landing	Over Current Protection (OCP) stops the motor when the transmitter throttle is set high and the propeller cannot turn	Fully lower throttle and throttle trim to arm ESC
Servo locks or freezes at full travel	Travel adjust value is set above 100%, overdriving the servo	Set Travel adjust to 100% or less and/or set sub-trims to Zero and adjust linkages mechanically

## Limited Warranty

### What this Warranty Covers

Horizon Hobby, Inc. ("Horizon") warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase.

### What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

### Purchaser's Remedy

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s)

involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

### Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. 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 the Product, purchaser is advised to return the 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). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

### WARRANTY SERVICES

#### Questions, Assistance, and Services

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or 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 visit our website at [www.horizonhobby.com](http://www.horizonhobby.com), submit a Product Support Inquiry, or call 877.504.0233 toll free to speak to a Product Support representative.

#### Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. 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. An Online Service Request is available at [http://www.horizonhobby.com/content/\\_service-center\\_render-service-center](http://www.horizonhobby.com/content/_service-center_render-service-center). If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

**NOTICE: Do not ship LiPo batteries to Horizon. If you have any issue with a LiPo battery, please contact the appropriate Horizon Product Support office.**

### Warranty Requirements

**For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date.** Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

### Non-Warranty Service

**Should your service not be covered by warranty, service 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 service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website [http://www.horizonhobby.com/content/\\_service-center\\_render-service-center](http://www.horizonhobby.com/content/_service-center_render-service-center).

**NOTICE: Horizon service is limited to Product compliant in the country of use and ownership. If non-compliant product is received by Horizon for service, it will be returned unserviced at the sole expense of the purchaser.**

## Warranty and Service Information

Country of Purchase	Horizon Hobby	Address	Phone Number/Email Address
United States of America	Horizon Service Center (Electronics and engines)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 Online Repair Request visit: www.horizonhobby.com/service
	Horizon Product Support (All other products)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 productsupport@horizonhobby.com
United Kingdom	Horizon Hobby Limited	Units 1-4 Ployters Rd Staple Tye Harlow, Essex CM18 7NS United Kingdom	+44 (0) 1279 641 097 sales@horizonhobby.co.uk
Germany	Horizon Technischer Service	Christian-Junge-Straße 1 25337 Elmshorn Germany	+49 (0) 4121 2655 100 service@horizonhobby.de
France	Horizon Hobby SAS	14 Rue Gustave Eiffel Zone d'Activité du Réveil Matin 91230 Montgeron	+33 (0) 1 60 47 44 70 infofrance@horizonhobby.com
China	Horizon Hobby – China	Room 506, No. 97 Changshou Rd. Shanghai, China, 200060	+86 (021) 5180 9868 info@horizonhobby.com.cn

## Compliance Information for the European Union

### Declaration of Conformity

(in accordance with ISO/IEC 17050-1)  
No. HH2012060901

Product(s): EFL UMX Sbach 3D  
Item Number(s): EFLU4950  
Equipment class: 1

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 301 489-1 V1.7.1: 2006**  
**EN 301 489-17 V1.3.2: 2008**



Signed for and on behalf of:  
Horizon Hobby, Inc.  
Champaign, IL USA  
June 09, 2012

Steven A. Hall  
Vice President  
International Operations and Risk Management  
Horizon Hobby, Inc.

## 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 collections 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.

**– Replacement Parts –**  
**– Ersatzteile –**  
**– Pièces de rechange –**  
**– Pezzi di ricambio –**

Part # • Nummer Numéro • Codice	Description	Beschreibung	Description	Descrizione
EFLU4146	Pushrod Set: UMX Sbach 342	Schubstange: UMX Sbach 342	Set de tringleries: UMX Sbach 342	Astine comandi: UMX Sbach 342
EFLU4951	Spinner: UMX Sbach 342 3D	Spinner: UMX Sbach 342 3D	Cône: UMX Sbach 342 3D	Ogiva: UMX Sbach 342 3D
EFLU4152	SFG Set: UMX Sbach 342	SFG Set: UMX Sbach 342	Set de SFG: UMX Sbach 342	SFG Set: UMX Sbach 342
EFLU4954	Wheel Pant Set: UMX Sbach 342 3D	Radverkleidung: UMX Sbach 342 3D	Set de chapeaux de roues: UMX Sbach 342 3D	Set carenatura ruote: UMX Sbach 342 3D
EFLU4155	Landing Gear with Wheels: UMX Sbach 342	Fahrwerk mit Rädern: UMX Sbach 342	Train avec roues: UMX Sbach 342	Carrello atterraggio con ruote: UMX Sbach 342
EFLU4958	Fuselage Set: UMX Sbach 342 3D	Rumpf: UMX Sbach 342 3D	Set de fuselage: UMX Sbach 342 3D	Set fusoliera: UMX Sbach 342 3D
EFLU4959	Wing: UMX Sbach 342 3D	Tragfläche: UMX Sbach 342 3D	Aile: UMX Sbach 342 3D	Ala: UMX Sbach 342 3D
EFLU4960	Tail Set: UMX Sbach 342 3D	Leitwerk: UMX Sbach 342 3D	Set d'empennage: UMX Sbach 342 3D	Set piani di coda: UMX Sbach 342 3D
EFLU4962	Battery Hatch: UMX Sbach 342 3D	Batteriefach: UMX Sbach 342 3D	Trappe de batterie: UMX Sbach 342 3D	Copertura vano batteria: UMX Sbach 342 3D
EFLU4963	Canopy: UMX Sbach 342 3D	Kabinenhaube: UMX Sbach 342 3D	Bulle: UMX Sbach 342 3D	Cappottina: UMX Sbach 342 3D
EFLU4965	Decal Set: UMX Sbach 342 3D	Dekorbogen: UMX Sbach 342 3D	Set de décoration: UMX Sbach 342 3D	Set adesivi: UMX Sbach 342 3D
EFLUP050275	5 x 2.75 Electric Propeller: UMX Beast, Sbach 342	5 x 2,75: UMX Beast, Sbach 342	5 x 2.75 Hélice électrique: UMX Beast, Sbach 342	Elica 5 x 2,75: UMX Beast, Sbach 342
EFLU4167	Prop Adapter: UMX Sbach	Eflite Propeller Adapter: UMX Sbach 342	Adaptateur d'hélice: UMX Sbach	Adattatore elica: UMX Sbach
EFLUM180BL2	180 Brushless Outrunner Motor 2500KV	BL180 Brushless Außenläufer Motor 2500 kv	Moteur brushless à cage tournante 180 2500kv	180 Motore brushless cassa rotante 2500KV
SPMAS6410NBL	Spektrum 6 Ch AS3X Receiver w/ BL ESC	Spektrum 6 Kanal AS3X Empfänger m. BL Regler	Module Spektrum 6 voies Rx/ESC/AS3X	Ricevitore Spektrum 6 CH AS3X con ESC BL
SPMSA2030L	2.3-Gram Performance Linear Long Throw Servo	2,3 Gramm Hochleistungs - Linear Servo mit langem Ruderweg	Servo 2.3g linéaire longue course performant	Ottimo servo lineare a corsa lunga da 2,3 Grammi
SPM6836	Replacement Servo Mechanics: Ultra Micro Long Throw	Austausch Servo Mechanik: Ultra Micro Long Throw	Mécanique de remplacement pour servo: Ultra micro longue course	Meccanica ricambio per servo: Ultra Micro Long Throw
EFLU4066	Firewall: Beast	Brandschott: UMX Beast	Support Moteur: UMX Beast	Ordinata: UMX Beast

**– Optional Parts and Accessories –**  
**– Optionale Bauteile und Zubehörteile –**  
**– Pièces optionnelles et accessoires –**  
**– Parti opzionali e accessori –**

Part # • Nummer Numéro • Codice	Description	Beschreibung	Description	Descrizione
EFLUB1802S20	2S 7.4V 180mAh Li-Po Battery	2S 7.4V 180mAh Li-Po Akku	Batterie Li-Po 7.4V 2S 180mA	2S 7.4V 180mAh Li-Po Batteria
EFLUC1007	Celectra 2S 7.4V DC Li-Po Charger	Celectra 2S 7.4V DC Li-Po Ladegerät	Celectra Chargeur Li-Po 7.4V 2S	Celectra 2S 7.4V DC Li-Po Caricabatterie
EFLA700UM	Charger Plug Adapter: EFL	Ladekabel Adapter EFL	Prise d'adaptation chargeur: EFL	Adattatore connettore caricabatterie: EFL
EFLA7001UM	Charger Plug Adapter: Thunder Power	Ladekabel Adapter Thunder Power	Prise d'adaptation chargeur: Thunder Power	Adattatore connettore caricabatterie: Thunder Power
EFLU4068	Harness Adapter: UMX Beast	E-flite UMX Beast Y-Kabel	Adaptateur de câblage: UMX Beast	Adattatore collegam- enti: UMX Beast
SPM6825	Ultra Micro Linear Servo Reverser	Spektrum Ultra Micro Linear Servo Reverser	Inverseur d'ultra micro servo linéaire	Invertitore per servi lineari ultra micro
EFLC4000/UK/ AU/EU	AC to 12V DC, 1.5 Amp Power Supply (Based upon your sales Region)	Netzteil 12V 1,5 A (Basierend nach Vertriebsregion)	Alimentation CA vers 12V CC, 1,5 A (En fonction de votre région)	Alimentatore CA - 12V CC da 1,5 A (in base al Paese di vendita)
	DX5e DSMX 5-Channel Transmitter	DX5e DSMX 5-Kanal Sender	Emetteur DX5e DSMX 5 voies	DX5e DSMX Trasmettitore 5 canali
	DX6i DSMX 6-Channel Transmitter	DX6i DSMX 6-Kanal Sender	Emetteur DX6i DSMX 6 voies	DX6i DSMX Trasmettitore 6 canali
	DX7s DSMX 7-Channel Transmitter	Spektrum DX7s 7 Kanal Sender	Emetteur DX7s DSMX 7 voies	DX7s DSMX Trasmettitore 7 canali
	DX8 DSMX Transmitter	Spektrum DX8 nur Sender	Emetteur DX8 DSMX 8 voies	DX8 DSMX Solo trasmettitore

**– Parts Contact Information –**  
**– Intaktinformationen für Ersatzteile –**  
**– Coordonnées pour obtenir les pièces détachées –**  
**– Recapiti per i pezzi di ricambio –**

Country of Purchase	Horizon Hobby	Address	Phone Number/Email Address
United States	Sales	4105 Fieldstone Rd Champaign, Illinois, 61822 USA	800-338-4639 sales@horizonhobby.com
United Kingdom	Horizon Hobby Limited	Units 1-4 Ployters Rd Staple Tye Harlow, Essex CM18 7NS, United Kingdom	+44 (0) 1279 641 097 sales@horizonhobby.co.uk
Germany	Horizon Hobby GmbH	Christian-Junge-Straße 1 25337 Elmshorn, Germany	+49 (0) 4121 2655 100 service@horizonhobby.de
France	Horizon Hobby SAS	14 Rue Gustave Eiffel Zone d'Activité du Réveil Matin 91230 Montgeron	+33 (0) 1 60 47 44 70 infofrance@horizonhobby.com
China	Horizon Hobby – China	Room 506, No. 97 Changshou Rd. Shanghai, China, 200060	+86 (021) 5180 9868 info@horizonhobby.com.cn



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US 7,898,130. US D578,146. PRC ZL 200720069025.2. Other patents pending.

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