

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit 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.

**<u>CAUTION:</u>** 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 use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. 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.

## **Safety Precautions and Warnings**

- Always keep a safe distance in all directions 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 the 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.

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# **Specifications**

⊢ 16.5 in (418mm) −	RTF	BNF		
	Installed	Installed		6mm Brushed Motor
295mm	Installed	Installed		DSM2 <sup>®</sup> /DSMX <sup>®</sup> Receiver/ESC
- 11.6 in (295mm)	Installed	Installed		(2) Servos on the Receiver/ESC Board
	Included	Included	<b>- +</b> ¢	70mAh 1S 3.7V 14C Li-Po battery
Weight: 0.78 oz (22 g)	Included	Included	+	1S 3.7V Li-Po Battery Charger
Wing Area: 45.3 in <sup>2</sup> (292 dm 2)	Included	Needed to Complete	(((((')))))) ⊙⊙	DSM2/DSMX 4-Channel Transmitter

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

# **Charging Warnings**

The Battery Charger (EFLC1000) included with your aircraft has been designed to safely charge the Li-Po battery.

**CAUTION:** All instructions and warnings must be followed exactly. Mishandling of Li-Po batteries can result in a fire, personal injury and/or property damage.

- By handling, charging or using the included Li-Po battery, you assume all risks associated with lithium batteries.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40–120° F (5–49° C). Do not store the battery or model in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.
- Always charge batteries away from flammable materials.
- Always inspect the battery before charging.

✓	
	6. Set dual rates and expos.
	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.

- Always disconnect the battery after charging, and let the charger cool between charges.
- Always constantly monitor the temperature of the battery pack while charging.
- ONLY USE A CHARGER SPECIFICALLY DESIGNED TO CHARGE LI-PO BATTERIES. Failure to charge the battery with a compatible charger may cause a fire resulting in personal injury and/or property damage.
- Never discharge Li-Po cells to below 3V under load.
- Never cover warning labels with hook and loop strips.
- Never leave charging batteries unattended.
- Never charge batteries outside recommended levels.
- Never charge damaged batteries.
- Never attempt to dismantle or alter the charger.
- Never allow minors to charge battery packs.
- Never charge batteries in extremely hot or cold places (recommended between 40–120° F (5–49° C)) or place in direct sunlight.

# **Battery Charging**

Your aircraft comes with a 1S 3.7V DC Li-Po battery charger and 1S 3.7V 70mAh 14C Li-Po battery. Refer to the charging warnings. It is recommended to charge the battery pack while you are inspecting the aircraft. The flight battery will be required to confirm proper aircraft operation in future steps.

Remove the cover on the bottom of the charger and install four of the included AA batteries, noting proper polarity. Replace the cover after the AA batteries are installed. Only use alkaline AA batteries.

## **Battery Charging Process**

**NOTICE:** Charge only batteries that are cool to the touch and are not damaged. Look at the battery to make sure it is not damaged e.g., swollen, bent, broken or punctured.

- Slide the battery into the slot on the charger and press it into the charge jack/connector located at the bottom of the slot. The end cap of the battery is specifically designed to allow the battery to fit into the slot one way (usually with the label on the battery facing outward) to prevent reverse polarity connection. However, check for proper alignment and polarity.
- Always disconnect the flight battery from the charger immediately upon completion of charging.

**CAUTION:** Only use a charger specifically designed to charge a Li-Po battery. Failure to do so could result in fire, causing injury or property damage.

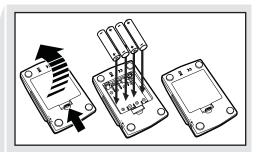
**CAUTION:** Never exceed the recommended charge rate.

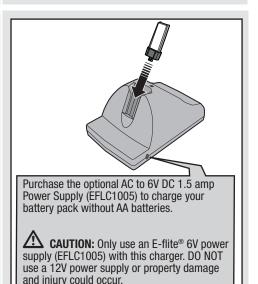
## **LED Indications**

When you make the connection successfully, the LED on the charger turns solid red, indicating charging has begun.

Charging a fully discharged (not over-discharged) 70mAh battery takes approximately 20–30 minutes. As the battery nears full charge, the LED begins to blink. The intervals between blinks will increase as the battery comes closer to full charge.

When the LED blinks approximately every 20 seconds, the battery is ready to be removed. However, the battery can be left charging until the LED completely goes out for a maximum charge.





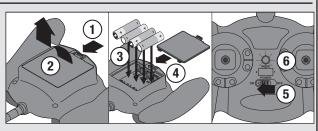
CHARGING (Solid Red)
READY (Blinking 20 sec. intervals)
MAX CHARGE (off)
If the LED stays on when the flight battery is removed, the AA batteries in the charger are low.
<b>CAUTION:</b> Once charging is complete, immediately remove the battery. Never leave a

battery connected to the charger.

## **Transmitter Batteries Installation**

READY-TO-FLY Your E-flite® 4-channel DSM2®/ DSMX® RTF transmitter comes pre-bound to the aircraft.

Remove the cover, install four of the included batteries (noting proper polarity) and reinstall the cover.



# BNF Transmitter and Receiver Binding

BIND-N-FLY

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

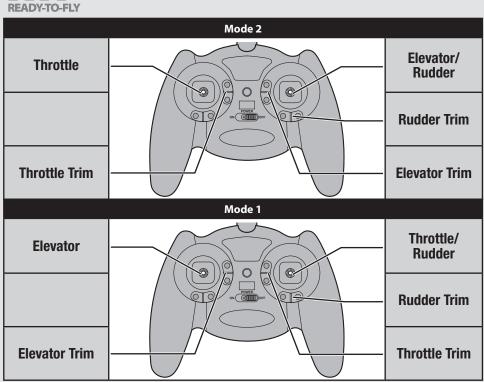
For a list of compatible DSM2/DSMX transmitters, please visit www.bindnfly.com.

**CAUTION:** When using a Futaba<sup>®</sup> 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.

$\checkmark$	Binding Procedure Reference Table	
	1. Refer to your transmitter's unique instructions for binding to a receiver.	5
	2. Make sure the flight battery is disconnected from the aircraft.	
	3. Ensure the transmitter is powered OFF.	
	4. Connect the flight battery to the aircraft. The receiver LED will begin to flash (typically after 5 seconds).	
	5. Make sure the transmitter controls are at neutral and the throttle is in the low position.	6
	6. Put your transmitter into bind mode. (If you are using the transmitter that is supplied with the RTF version, push the left control stick vertically into the case (until it clicks) while powering ON the transmitter).	
	<ol> <li>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 end of the manual.</li> </ol>	

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

# **Transmitter Control**



## **Digital Trims**

The E-flite® 4-channel DSM2/DSMX transmitter features digital trim buttons on all controls to make fine adjustments. The digital trims are used to fine-tune the model's flight path when in flight.

Before the first flight, center the control surfaces mechanically (see Control Centering).

When pressed down, trim buttons make a sound that increases or decreases in pitch at each pressing. The middle or neutral trim position is heard as a middle tone in the pitch range of the sounds. The end of the control range is sounded by a series of beeps.

# Dual Rate Function

This transmitter's dual rate feature lets you change between high and low control rates for the aileron, elevator and rudder.

- When powered ON, this transmitter is automatically set to high-rate mode.
- Change rate modes by pushing the right-hand control stick vertically into the case (until it clicks) while the transmitter is powered ON.
- . High-rate mode is shown by the transmitter's LED glowing solid red. In high-rate mode, the controls can reach their maximum values. This mode is typically preferred by experienced pilots for maximum control authority.
- Low-rate mode is shown by the transmitter's LED blinking continuously. In low-rate mode, the controls are reduced to approximately 70% of their maximum values. This mode is typically preferred by (and best for) beginner pilots or others interested in smoother and more easily controlled flight.

## **Flight Battery Installation and ESC Arming**

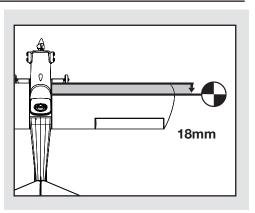
Arming the ESC also occurs after binding as previously described, but subsequent connection I ower throttle and of a flight battery requires the following steps. throttle trim to lowest settings. It is normal for linear servos to make noise. Noise is not an indication of a faulty servo. Power ON the Ľ transmitter, then wait 5 seconds. **CAUTION:** Always keep hands away from the propeller. When armed, the motor will turn the propeller in response to any throttle movement. -3-4-5 Sec. Connect the 2 battery to the ESC. noting proper CAUTION: Always disconnect the Li-Po polarity. 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 ₿ Continuous LED potential fire when batteries are charged. 3 Secure the battery to the hook and loop strip on the battery holder. Refer to the **Center of Gravity** Adjustment instructions for the battery's position. FLY...

# Center of Gravity (CG) Adjustment

The CG location is **18mm** back from the leading edge at the wing root.

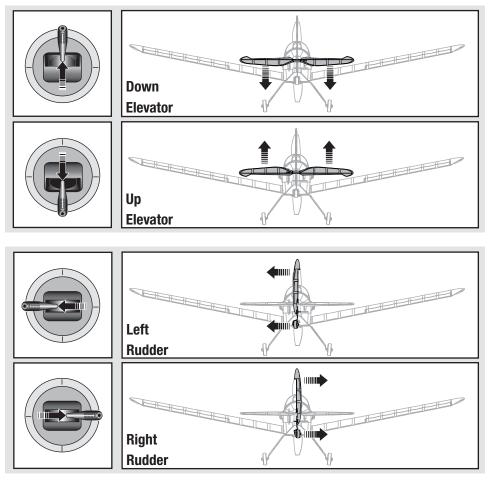
This CG location has been determined with the included 1S 70mAh 3.7V Li-Po battery installed in the battery cavity located on the bottom of the aircraft.

Balance the model on the edge of a metal ruler to find the Center of Gravity. Place the ruler on the underside of the airframe at the CG location shown in the image to the right. Move the battery forward or aft until the model closely balances at this location.



# **Control Direction Test**

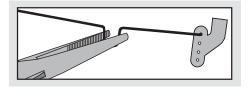
Bind your aircraft and transmitter before doing these tests. Move the controls on the transmitter to make sure aircraft control surfaces move correctly. Always keep throttle at the low position during testing.



## **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.



## **Control Horn Settings**

The table to the right shows the factory settings for the control horns. Fly the aircraft at factory settings before making changes.

After flying, you may choose to adjust the linkage positions for the desired control 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**

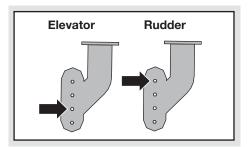
To obtain the best flight performance, we recommend using a DSM2/DSMX radio capable of adjustable Dual Rates. The suggested settings shown here are the recommended starting settings. Adjust according to the individual preferences after the initial flight.

**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.

## 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). Once the battery discharges to 3V per cell, the LVC will reduce the power to the motor in order to leave adequate power to the receiver and servos to land the airplane.

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



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

Tip: For the first flight, fly the model in low rate.

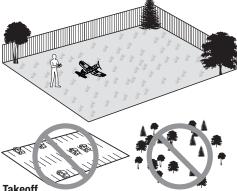
Always disconnect and remove the Li-Po battery from the aircraft after each flight. Fully charge your Li-Po battery before storing it. Make sure the battery charge does not fall below 3V per cell. Failure to unplug a connected battery will result in trickle discharge and damage to the battery.

For your first flights, set your transmitter timer or a stopwatch to 4 minutes. Adjust your timer for longer or shorter flights once you have flown the model.

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

# Flying Tips and Repairs

We recommend flying your aircraft inside a large gymnasium. We do not recommend flying the aircraft outdoors unless the conditions are absolutely calm. The aircraft is extremely light and can be easily blown away.



#### 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 34 to full and steer with the rudder. Pull back gently on the elevator and climb to a safe altitude to check trim. Once the trim is adjusted, begin exploring the flight envelope of the aircraft.

#### Landing

Land into the wind. Fly the aircraft to approximately 6 inches (15cm) or less above the runway, using a small amount of throttle for the entire descent. Keep the throttle on until the aircraft is ready to flare. During flare, keep the wings level and the airplane pointed into the wind. Gently lower the throttle while pulling back on the elevator to bring the aircraft down on all three wheels.

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

**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 the aircraft until the accelerant fully dries.

**NOTICE:** When you are finished flying, never leave the aircraft in direct sunlight or in a hot, enclosed area such as a car. Doing so can damage the foam.

## **Post Flight Checklist**

$\checkmark$	
	1. Disconnect the flight battery from the ESC (Required for safety and battery life).
	2. Power OFF the transmitter.
	3. Remove the flight battery from the aircraft.

$\checkmark$	
	4. Recharge the flight battery.
	5. Store the flight battery apart from the aircraft and monitor the battery charge.
	<ol><li>Make note of the flight conditions and flight plan results, planning for future flights.</li></ol>

## **Power Components Service**

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

#### Disassembly

- 1. Disconnect the battery from the ESC/receiver.
- 2. Carefully cut the tape and/or decals on the side of the fuselage to remove the top of the fuselage.

**IMPORTANT:** Removing tape and/or decals can remove paint from the fuselage.

- 3. Hold the prop shaft using needle-nose pliers or hemostats.
- 4. Turn the propeller counterclockwise (facing the front of the model) to remove. Turn the propeller clockwise to install.
- 5. Carefully remove the spinner and glue from the propeller.
- Hold the nut (A) on the end of the prop shaft using needle-nose pliers or hemostats.
- 7. Turn the gear on the shaft clockwise (facing the front of the model) to remove the nut.
- Gently pull the shaft (B) from the gearbox (C) and make sure the washer (D) and two bushings (E) are not lost.
- 9. Disconnect the motor from the ESC/ receiver.
- Gently push the motor out of the gearbox and remove the motor through the top of the fuselage behind the ESC/receiver.

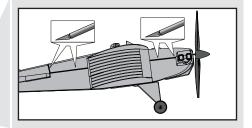
**NOTICE:** DO NOT remove the gearbox from the aircraft. Damage to the aircraft could result.

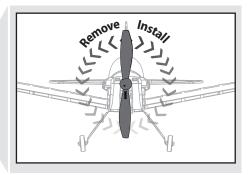
#### Assembly

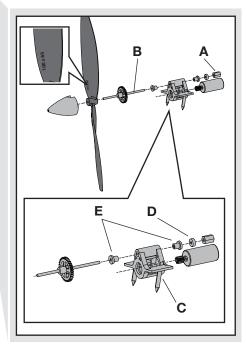
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Assemble the aircraft using the instructions above in reverse order.

- Correctly align the prop shaft gear with the pinion gear on the motor.
- Connect the motor to the ESC/receiver so that the powered motor turns the propeller counterclockwise (facing the front of the model).
- Make sure the propeller size numbers (100 x 60) face away from the motor (see illustration).
- Attach the spinner to the propeller using foamcompatible CA (cyanoacrylate adhesive).
- Assemble the fuselage using clear tape.







# Troubleshooting Guide

Problem	Possible Cause	Solution
Aircraft will not respond to throttle but responds	Throttle stick and/or throttle trim too high	Reset controls with throttle stick and throttle trim at lowest setting
to other controls	Throttle channel is reversed	Reverse throttle channel on transmitter
	Motor disconnected from receiver	Open fuselage and make sure motor is properly connected to the receiver
Extra propeller noise or extra vibration	Damaged propeller, prop shaft, spinner or motor	Replace damaged parts
Reduced flight time or	Flight battery charge is low	Completely recharge flight battery
aircraft underpowered	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 power drawn	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 pro- cess. 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
LED on receiver flashes rapidly and aircraft will not respond to transmit-	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
ter (after binding)	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, con- nect 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

## **Troubleshooting Guide (Continued)**

Problem	Possible Cause	Solution
Motor loses power	Damage to motor or power components	Do a check of motor and power components for damage (replace as needed)
	Flight battery charge is too low	Fully recharge flight battery
Motor power quickly decreases and in- creases 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
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, LLC ("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, submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with 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. 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.

## Warranty and Service Information

#### **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 1/2 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.

ATTENTION: Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.

Country of Purchase	Horizon Hobby	Phone Number/Email Address	Address	
United States of America	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/ RequestForm/		
	Horizon Product Support	www.quickbase.com/db/ bghj7ey8c?a=GenNewRecord	4105 Fieldstone Rd Champaign, Illinois, 61822 USA	
	(Product Technical Assistance)	888-959-2305		
	Salaa	sales@horizonhobby.com		
	Sales	888-959-2305		
United Kingdom	Service/Parts/Sales:	sales@horizonhobby.co.uk	Units 1–4 , Ployters Rd,	
	Horizon Hobby Limited	+44 (0) 1279 641 097	Staple Tye Harlow, Essex, CM18 7NS, United Kingdom	
Germany	Horizon Technischer Service	service@horizonhobby.de	Christian-Junge-Straße 1	
	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	25337 Elmshorn, Germany	
France	Service/Parts/Sales:	infofrance@horizonhobby.com	11 Rue Georges Charpak 77127 Lieusaint, France	
	Horizon Hobby SAS	+33 (0) 1 60 18 34 90		
China	Service/Parts/Sales:	info@horizonhobby.com.cn	Room 506,	
	Horizon Hobby – China	+86 (021) 5180 9868	No. 97 Changshou Rd. Shanghai, China 200060	

## **FCC Information**

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.

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

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400GHz to 2.4835GHz frequency range.

## **ICC Information**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## **Compliance Information for the European Union**

## **Declaration of Conformity**

(in accordance with ISO/IEC 17050-1) No. HH2014062203

Product(s): Item Number(s): Equipment class:

UMX Spacewalker BNF EFLU2780 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, EMC Directive 2004/108/EC and LVD Directive 2006/95/EC

EN 301 489-1 V1.9.2: 2012 EN 301 489-17 V2.1.1: 2009

EN60950-1:2006+A11:2009+A1:2010+A12: 2011

EN55022:2010 + AC:2011 EN55024:2010



Signed for and on behalf of: Horizon Hobby, LLC Champaign, IL USA June 22, 2014

Robert Peak Chief Financial Officer Horizon Hobby, LLC

(in accordance with ISO/IEC 17050-1) No. HH2014062202

Product(s): Item Number(s): Equipment class: UMX Spacewalker RTF EFLU2700, EFLU2700M1 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, EMC Directive 2004/108/EC and LVD Directive 2006/95/ EC

EN 300-328 V1.7.1: 2006 EN 301 489-1 V1.9.2: 2012 EN 301 489-17 V2.1.1: 2009

EN60950-1:2006+A11:2009+A1:2010+A12: 2011

EN55022:2010 + AC:2011 EN55024:2010

Signed for and on behalf of: Horizon Hobby, LLC Champaign, IL USA June 22, 2014

Robert Peak Chief Financial Officer Horizon Hobby, LLC

### 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
EFLU2702	Decal Sheet: UMX Spacewalker	Dekorbogen: UMX Spacewalker	Planche de décal- comanies : UMX Spacewalker	Foglio con decal- comanie: UMX Spacewalker
EFLU2703	Landing Gear Set: UMX Spacewalker	Fahrgestellsatz: UMX Spacewalker	Jeu de train d'atterrissage : UMX Spacewalker	Set carrello di atter- raggio: UMX Spacewalker
EFLU2720	Main Wing Set: UMX Spacewalker	E-flite UMX Space- walker: Tragfläche	Aile: UMX Space- walker	Set ala principale: UMX Spacewalker
EFLU2726	Pushrod Set: UMX Spacewalker	E-flite UMX Space- walker: Gestänge	Set de tringlerie: UMX Spacewalker	Set rinvii: UMX Space- walker
EFLU2725	Tail with Ac- cessories: UMX Spacewalker	E-flite UMX Space- walker: Leitwerk m. Zbh.	Empennages avec accessoires: UMX Spacewalker	Coda con accessori.: UMX Spacewalker
EFLU2767	Fuselage with Windscreen: UMX Spacewalker	E-flite UMX Space- walker: Rumpf m. Scheibe	Fuselage avec pare-brise: UMX Spacewalker	Fusoliera con parabrezza: UMX Spacewalker
PKZ3901	Prop with Spinner (100mm x 60mm)	Parkzone Prop mit Spinner (100mm x 60mm)	Hélice avec cône (100mm x 60mm)	Elica con ogiva (100mm x 60mm)
PKZ3429	Prop Shaft with Gear	Parkzone Lufts- chraubenwelle und Getriebe	Axe d'hélice avec couronner	Albero elica con ingranaggio
PKZ3916	Motor 6mm	Parkzone Motor 6mm	Moteur diamètre 6mm	Motore 6mm
PKZ3928	Complete Gearbox	Parkzone Getriebe kpl.	Réducteur complet	Riduttore completo
PKZ3904	Prop Shaft with Nut	Parkzone Getriebe kpl.	Axe d'hélice avec écrou	Albero elica con dado
EFLUP112903B	112 x 90mm 3 Blade Propeller	112 x 90 mm- 3-Blattpropeller	Hélice 3 pales 112 x 90 mm	Elica 112 x 90 mm a 3 lame
EFLC1003	DC 3.7V Li-Po Charger	DC-3,7V-Li-Po- Ladegerät	Chargeur Li-Po DC 3,7 V	Caricabatterie Li-Po CC da 3,7 V
EFLH1064B	2.4GHz Transmitter: MLP4DSM	2,4GHz-DSM2- Sender: MLP4DSM	Émetteur 2,4 GHz : MLP4DSM	Trasmettitore 2,4 GHz: MLP4DSM
EFLB0701S	70mAh 1S 3.7V 14C LiPo Battery	E-flite 70mAh 1S 3.7V 14C LiPo Akku	Batterie Li-Po 1S 3.7V 70mA 14C	Batteria LiPo 70mAh 1S 3.7V 14C
PKZ3352	Receiver/ESC DSM2/X	Parkzone Empfän- ger/ReglerDSM2/X	Module RX/Vario DSM2/DSMX	Ricevitore/ESC DSM2/X

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

Part # • Nummer Numéro • Codice	Description	Beschreibung	Description	Descrizione
PKZ1039	Hook and Loop Set	Parkzone: Klettband	Ultras Micros - Bande	Set fascette a strappo
	(5): Ultra Micros	Set Ultra Micros	auto-agrippante (5)	(5): Ultra Micro
EFLC1004	Celectra 4-Port 1S 3.7V 0.3A DC Li-Po Charger	Celectra-1S-3,7V- 0,3A-DC-Li-Po- Ladegerät mit 4 Anschlüssen	Chargeur Li-Po CC 0,3 A 3, 7 V 1S 4 ports Celectra	Caricabatterie Li-Po 1S da 3,7 V 0,3 A CC, a 4 porte, Celectra
EFLC1005/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	DX5e DSMX 5-Kanal	Emetteur DX5e DSMX	DX5e DSMX
	5-Channel Transmitter	Sender	5 voies	Trasmettitore 5 canali
	DX6 DSMX 6-Channel	DX6 DSMX 6-Kanal	Emetteur DX6 DSMX	DX6 DSMX
	Transmitter	Sender	6 voies	Trasmettitore 6 canali
	DX7s DSMX	Spektrum DX7s	Emetteur DX7s DSMX	DX7s DSMX
	7-Channel Transmitter	7 Kanal Sender	7 voies	Trasmettitore 7 canali
	DX8 DSMX	Spektrum DX8 nur	Emetteur DX8 DSMX	DX8 DSMX Solo
	Transmitter	Sender	8 voies	trasmettitore
	DX9 DSMX	Spektrum DX9 nur	Emetteur DX9 DSMX	DX9 DSMX Solo
	Transmitter	Sender	9 voies	trasmettitore
	Gen 2 DX18 (Voice 18) Transmitter	DX18 Gen. 2 Sender (Sprachausgabe)	DX18 Gen 2 (Vocale)	Trasmettitore Gen 2 DX18 (Voce18)

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US 7,898,130. US D578,146. PRC ZL 200720069025. PRC ZL 2007001249.

Other patents pending.

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