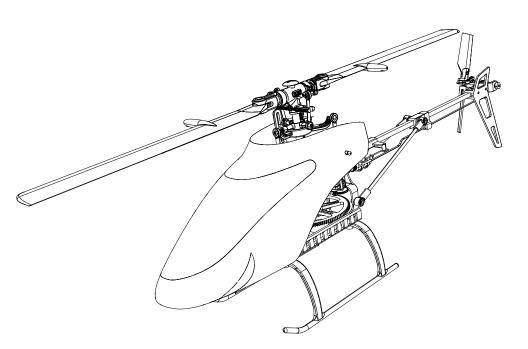


# 130 X





#### 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 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 a 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.

<u>WARNING:</u> 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.

## Safety Precautions and Guidelines

- 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.

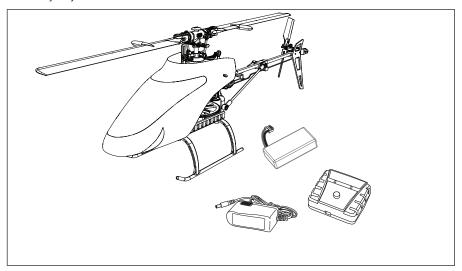
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.
- Always keep aircraft in sight and under control.
- Always turn throttle hold on if the helicopter is out of control or in danger of crashing.
- 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.
- Never operate aircraft with damaged wiring.
- Never touch moving parts.

FN

#### Introduction

Thank you for purchasing the Blade® 130 X Helicopter—a great new Horizon Hobby RC product designed by experts in RC to make your flying experience as unique as it is rewarding. The 130 X comes out of the box completely assembled and flight tested. If you've already moved up through coaxial machines to single-rotor models like the mSR or 120 SR, you're going to find the 130 X just as stable and predictable. Chances are you'll feel like a pro after just a few minutes on the sticks. And while it's certainly small enough to fly indoors, the 130 X is also agile enough to fly in the backyard with a bit of a breeze. You can also adjust its control response rate and sensitivity for extra control authority when flying indoors or out. And, thanks to 2.4GHz DSM2®/DSMX® radio technology, you can fly several 130 X Helicopters with friends without worrying about radio interference.

Before you get started though, you must read this manual. As simple as the Blade 130 X is to fly, it's still a sophisticated Radio Controlled flying machine that has some features and pre-flight checks you'll need to become familiar with before you fly.



## **Table of Contents**

Blade 130 X Specifications					
Length	305mm (12.0 in)				
Height	122mm (4.8 in)				
Main Rotor Diameter	325mm (12.8 in)				
Tail Rotor Diameter	76mm (3.0 in)				
Flying Weight	107 g (3.8 oz)				

Visit www.bladehelis.com to register your helicopter

## **Charging Warnings**

The charger included with the 130 X has been designed to safely charge the included 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 (4–49° C). Do not store
  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 and never charge damaged batteries.
- Only use a charger specifically designed to charge Li-Po batteries. Failure to charge the battery with a compatible charger may cause fire resulting in personal injury and/or property damage
- Always constantly monitor the temperature of the battery pack while charging.
- Always disconnect the battery after charging, and let the charger cool between charges.
- 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.
- Only charge batteries that are cool to the touch.
- · 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 or 4–49° C) or place in direct sunlight.

## First Flight Preparation

- · Remove and inspect the box contents
- · Charge the flight battery
- · Program your computer transmitter
- Install the fully charged flight battery in the helicopter
- Bind your transmitter to the helicopter
- Familiarize yourself with the flight controls
- Find an open area for flying

## Flying Checklist

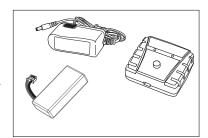
- $\hfill \square$  Always turn the transmitter on first
- Plug the flight battery into the lead from the flybarless unit
- Allow the flybarless unit to initialize and arm properly
- □ Fly the model
- Land the model
- ☐ Unplug the flight battery from the flybarless unit
- □ Always turn the transmitter off last

## **Battery Charging**

Celectra™ 2-Cell 7.4V DC Li-Po Charger (EFLUC1007) 2S 7.4 V 300mAh 35C Li-Po Battery Pack (E-flite EFLB3002S35)

The Blade 130 X 2S Li-Po battery features an EFL2 connector that allows you to safely charge your battery pack when used with the included Li-Po charger and charge adapter. The included flight battery is safe to charge up to 3C (0.9 Amp). Use only Horizon Hobby approved battery packs and chargers compatible with this product.

- 1. Connect the power supply to an appropriate power source.
- 2. Connect the battery charger to the power supply.
- 3. Align the tab on both the battery and charger connectors. Connect the battery to the charger lead.
- 4. Press the Start/Stop button on the charger.
- 5. Battery charging is complete when the charger LED is solid green.



#### AC Power Supply Precautions and Guidelines

NEVER attempt to power the charger from an AC outlet without the use of a proper AC to DC adapter/power supply.

DO NOT connect charged or discharged Li-Po batteries if the power supply is connected to the charger but the power supply is not connected to a power source. Doing so will discharge and possibly damage the batteries. For AC operation, only use an E-flite® 12V power supply with this charger.

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## **Programming Your Transmitter**

Program your transmitter before attempting to bind or fly the helicopter. Transmitter programming values are shown below for the Spektrum DX6i, DX7/DX7se, DX7s and DX8. The Spektrum model files for transmitters with AirWare™ software are also available for download online in the Spektrum Community.

**NOTICE:** When using a Futaba® transmitter with a Spektrum DSM® module, you must reverse the throttle channel.

## Spektrum DX6i Transmitter Setup

SETUP LIST	•		
Model Type	Reverse	Swash Type	Timer
HELI	THRO-N	1 Servo 90 Degree	Type—Down
	AILE—N		Time—4:00
	ELEV—N		Switch—Trainer
	RUDD—N		
	GYRO—N		
	PITC—R		

#### **ADJUST LIST**

	D/R	Expo
AILE 0	100%	40%
ELEV 0	100%	40%
RUDD 0	100%	INH
AILE 1	85%	40%
ELEV 1	85%	40%
RUDD 1	80%	INH

TRAVEL ADJUST					
THR0	100%				
AILE	100%				
ELEV	100%				
RUDD	100%				
GYRO	100%				
PITC	100%				

SUB-TRIM*				
THR0	0			
AILE	0			
ELEV	0			
RUDD	0			
GYR0	0			
PITC	0			

THRO CUR						PITC CU	R				
	L	2	3	4	Н		L	2	3	4	Н
NORM	0%	40%	60%	68%	75%	NORM	30%	40%	50%	75%	100%
STUNT	100%	100%	100%	100%	100%	STUNT	0%	25%	50%	75%	100%
HOLD	10%	10%	10%	10%	10%	HOLD	0%	25%	50%	75%	100%

GYRO	SWASH MIX
INHIBIT	INHIBIT

<sup>\*</sup> Never use sub-trims or trims on AILE, ELEV or RUDD channels.

# Spektrum DX7/DX7se Transmitter Setup

SYSTEM LIS	ST		
Model Type	Swash Type	Input S	elect
HELI	1 Servo Norm	AUX2 INH	GEAR GYRO

## **ADJUST LIST**

POS-0

POS-1

AILE	ELEV	RUDD	AILE	ELEV	RUDD	AUT0	D/R	EXP
EXP 40%	EXP 40%	EXP 0%	EXP 40%	EXP 40%	EXP 0%		NORM	INH
D/R 100%	D/R 100%	D/R 100%	D/R 85%	D/R 85%	D/R 100%		ST-1	INH
							ST-2	INH
							HOLD	INH

REVERS	ING SW	ı					SUB-TR	IM*	TRAVEL AD.	JUST
THR0	AILE	ELEV	RUDD	GEAR	PIT	AUX2	THR0	0	THRO	ı
N	N	N	N	N	N	N	AILE	0	H 100%	L
							ELEV	0	L 100%	F
GYRO S	ENC	THR	O HOLD				RUDD	0		
	LINO						GEAR	0	ELEV	
INH		HOL	D POS	0.0%			PITC	0	D 100%	L
		SW		RUDD D/F	3				U 100%	F
							AUX2	0	-	
									GEAR	F
									+ 100%	ŀ
TIMER			SV	VASH MIX	(				- 100%	L
DOWN-	Γ 4	1:00	IN						AUX2	
									+ 100%	

THR0	AILE
H 100%	L 100%
L 100%	R 100%
ELEV	RUDD
D 100%	L 100%
U 100%	R 100%
GEAR	PIT
+ 100%	H 100%
- 100%	L 100%
AUX2	
+ 100%	

THRO CURVE							
	L	1	2	3	Н		
NORM	0%	40%	60%	68%	75%		
ST-1	75%	75%	75%	75%	75%		
ST-2	100%	100%	100%	100%	100%		

PITCH CURVE							
	L	1	2	3	Н		
NORM	30%	40%	50%	75%	100%		
ST-1	0%	25%	50%	75%	100%		
ST-2	0%	25%	50%	75%	100%		
HOLD	0%	25%	50%	75%	100%		

<sup>\*</sup> Never use sub-trims or trims on AILE, ELEV or RUDD channels.

# Spektrum DX7s Transmitter Setup

## **SYSTEM LIST**

Model Type	Swash Type	Switch Select	F Mode Setup	Warnings	Frame Rate
Helicopter	1 Servo Normal	All Switches INH	Flight Mode — F Mode	Throttle —Over 10	22ms
			Hold — Hold	Stunt 1—Active	DSMX
				Hold—Active	
				Alarm—Tone/Vibe	

## **FUNCTION LIST**

SERVO SETU	IP					
TRAVEL			SUB TRIM*		REVERSE	
THROTTLE	100	100	THROTTLE	0	THROTTLE	N
AILERON	100	100	AILERON	0	AILERON	N
ELEVATOR	100	100	ELEVATOR	0	ELEVATOR	N
RUDDER	100	100	RUDDER	0	RUDDER	N
GYR0	100	100	GYRO	0	GYR0	N
PITCH	100	100	PITCH	0	PITCH	N
AUX2	100	100	AUX2	0	AUX2	N

THROTTLE CUT
INHIBIT
GOVERNOR
SW-INHIBIT

D/R AND EXPO							
	POS	D/R	D/R	EXP0	SW		
AILERON	0	100	100	40	AILE D/R		
AILERON	1	85	85	40	AILE D/R		
ELEVATOR	0	100	100	40	ELEV D/R		
ELEVATOR	1	85	85	40	ELEV D/R		
RUDDER	0	100	100	0	RUDD D/R		
RUDDFR	1	80	80	0	RUDD D/R		

GYRO	
INHIBIT	

THR	OTTLE C	URVE					
	LOW	25%	50%	75%	HIGH	EXP0	
N	0	40	60	68	75	INH	
1	100	100	100	100	100	INH	
Н	0	0	0	0	0	INH	

PIT	CH CURV	E				
	LOW	25%	50%	75%	HIGH	EXP0
N	30	40	50	75	100	INH
1	0	25	50	75	100	INH
Н	0	25	50	75	100	INH

TAII	L CURVE					
	LOW	25%	50%	75%	HIGH	EXP0
N	0	0	0	0	0	INH
1	0	0	0	0	0	INH
Н	0	0	0	0	0	INH

TIMER	
MODE	Countdown
TIME	4:00 Tone/Vibe
START	Throttle Out
POS	25

 $<sup>^{\</sup>star}\,$  Never use sub-trims or trims on AILE, ELEV or RUDD channels.

## Spektrum DX8 Transmitter Setup

Model Type	Swash Type	Switch Select	F Mode Setup	Trim Step	Warnings	Frame Rate
Helicopter	1 Servo Normal	All Switches INH	Flight Mode — F Mode	THR 5	Throttle —Over 10	22ms
			Hold — Hold	AIL** 0	Stunt 1—Act	DSMX
				ELE** 0	Stunt 2—Act	
				RUD** 0	Hold—Act	
				R TRIM 0	Alarm—Tone/Vibe	
				LTRIM 0		
				TYPE Common		

\*\*Changing trim step to zero disables the trim for that channel.

### **FUNCTION LIST**

CEDVO CET								
SERVO SET	JP							
TRAVEL			SUB TRIM*		REVERSE		SPEED	
THROTTLE	100	100	THROTTLE	0	THROTTLE	N	THROTTLE	NORM
AILERON	100	100	AILERON	0	AILERON	N	AILERON	NORM
ELEVATOR	100	100	ELEVATOR	0	ELEVATOR	N	ELEVATOR	NORM
RUDDER	100	100	RUDDER	0	RUDDER	N	RUDDER	NORM
GYR0	100	100	GYR0	0	GYR0	N	GYR0	NORM
PITCH	100	100	PITCH	0	PITCH	N	PITCH	NORM
AUX2	100	100	AUX2	0	AUX2	N	AUX2	NORM
AUX3	100	100	AUX3	0	AUX3	N	AUX3	NORM

SWA	SHPLATE
INHIE	BIT
THR	OTTLE CUT
INHIE	
cov	EDNOD
INHIE	ERNOR BIT

D/R AND EXPO						
	POS	D/R	D/R	EXP0	SW	
AILERON	0	100	100	40	AILE D/R	
AILERON	1,2	85	85	40	AILE D/R	
ELEVATOR	0	100	100	40	ELEV D/R	
ELEVATOR	1,2	85	85	40	ELEV D/R	
RUDDER	0	100	100	0	RUDD D/R	
RUDDER	1,2	80	80	0	RUDD D/R	

THE	THROTTLE CURVE						
	LOW	25%	50%	75%	HIGH	EXP0	
N	0	40	60	68	75	INH	
1	75	75	75	75	75	INH	
2	100	100	100	100	100	INH	
Н	0	0	0	0	0	INH	
GY	GYRO .						

PITCH CURVE					TAI	L CURV	Έ						
	LOW	25%	50%	75%	HIGH	EXP0		LOW	25%	50%	75%	HIGH	EXP0
N	30	40	50	75	100	INH	N	0	0	0	0	0	INH
1	0	25	50	75	100	INH	1	0	0	0	0	0	INH
2	0	25	50	75	100	INH	2	0	0	0	0	0	INH
Н	0	25	50	75	100	INH	Н	0	0	0	0	0	INH

TIMER	
MODE	Countdown
TIME	4:00 Tone/ Vibe
START	Throttle Out
POS	25

 $<sup>^{\</sup>star}\,$  Never use sub-trims or trims on AILE, ELEV or RUDD channels.

INHIBIT



## 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™ DSM® transmitter to the flybarless unit before flying the helicopter.

#### General Binding Procedure

- 1. Disconnect the flight battery from the helicopter.
- Power off the transmitter and make sure the flight mode switch is in the Normal position. Move the throttle to the low/off position.
- Connect the flight battery to the flybarless control unit. The LED on the flybarless unit flashes after 5 seconds.
- 4. Put the transmitter into bind mode while powering on the transmitter.
- 5. Release the bind button after 2–3 seconds. The helicopter is bound when the blue LED on the flybarless unit is solid.
- 6. Disconnect the flight battery and power the transmitter off.

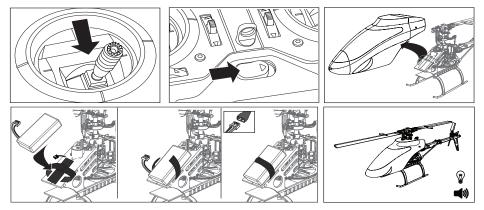


**CAUTION:** Futaba transmitters equipped with Spektrum modules require you to reverse the throttle channel.

If you encounter problems, obey binding instructions and refer to the troubleshooting guide for other instructions. If needed, contact the appropriate Horizon Product Support office.

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## **Installing the Flight Battery**



- 1. Lower the throttle.
- 2. Power on the transmitter.
- 3. Center the throttle trim.
- 4. Turn throttle hold on and move the flight mode switch to select Normal mode.
- 5. Install the flight battery in the battery holder. Connect the battery cable to the ESC.



**CAUTION:** Always keep the power lead positioned AWAY from the elevator servo. Failure to do so could cause the lead to get caught, resulting in a crash causing property damage and injury.

- 6. Do not move the helicopter until the flybarless control unit initializes.
- 7. The LED on the flybarless control unit turns solid blue when the helicopter is initialized.
- 8. Once the ESC beeps signaling the ESC is initialized, the helicopter is ready for flight.

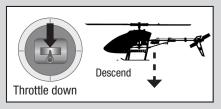
**CAUTION:** Low voltage cutoff does not protect the Li-Po battery during storage. If you allow the Li-Po battery voltage to fall below 3V per cell, you will damage the battery. The battery will no longer accept a charge and you will need to replace the battery. The warranty does not apply to batteries damaged from over-discharge.

## **Reviewing the Primary Flight Controls**

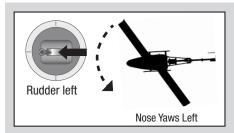
If you are not familiar with the controls of your 130 X, take a few minutes to familiarize yourself with them before attempting your first flight.

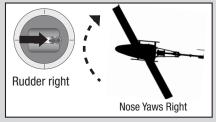
#### Throttle



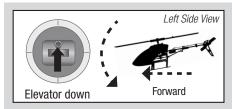


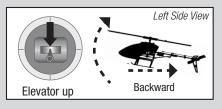
#### Rudder





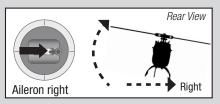
#### Elevator





#### Aileron





## Low Voltage Cutoff (LVC)

Low voltage cutoff (LVC) protects the Li-Po battery from overdischarge in flight and activates when the battery reaches 3V per cell under load. Set your transmitter timer for 4 minutes and land when the timer expires.

#### LVC Precautions and Guidelines

- · Repeatedly activating LVC damages the flight battery and you will need to replace the battery.
- Always unplug the Li-Po battery from the flybarless unit at the end of each flight. Failure to unplug the Li-Po battery
  during storage will over-discharge the battery and will prevent it from charging in the future.
- LVC does not protect the battery from over-discharge during storage.
- The warranty does not cover crash damage or battery damage.

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## Flying the 130 X

**Consult local laws and ordinances before choosing a location to fly your aircraft.** Select a large, open area away from people and objects. The Blade 130 X can fly outdoors or indoors in a gymnasium.



**CAUTION:** Familiarize yourself with the Blade 130 X primary controls before attempting your first flight. The Blade 130 X is more responsive than other Blade micro helicopters like the Blade mSR. Seek help from an experienced pilot if you are new to collective pitch helicopters.

#### Takeoff

Quickly increase the throttle to 1/2 throttle and establish a low level hover.



CAUTION: Do not give any aileron, elevator or rudder commands before takeoff or the helicopter may crash.

#### **Flving**

The helicopter lifts off the ground when the rotor head reaches a suitable speed. Establish a low-level hover to verify proper operation of your helicopter. You will not need to set any trim; the flybarless design of the 130 X renders trim unnecessary.

For pilots new to collective pitch helicopters, familiarize yourself with the 130 X in normal mode. Discover the rates that fit your flying style.

#### Stunt Mode

When the helicopter is in stunt mode:

- The rotor head speed is constant and high.
- The main rotor will increase negative pitch as the throttle/collective stick is moved from the middle stick position to
  the low stick position. Negative pitch allows the helicopter to fly upside down and perform aerobatics.

Change between normal and stunt modes with the throttle near the hover stick position. The helicopter may go up or down when you change between modes due to the difference in the throttle and pitch curves.

#### Throttle Hold

Throttle hold only turns off the motor on an electric helicopter. You maintain pitch and direction control.

The blades will spin if throttle hold is OFF. For safety, turn throttle hold ON any time you need to touch the helicopter or check the direction controls.

Throttle hold is also used to turn off the motor if the helicopter is out of control, in danger of crashing, or both. Please refer to your transmitter manual for more information on programming throttle hold.



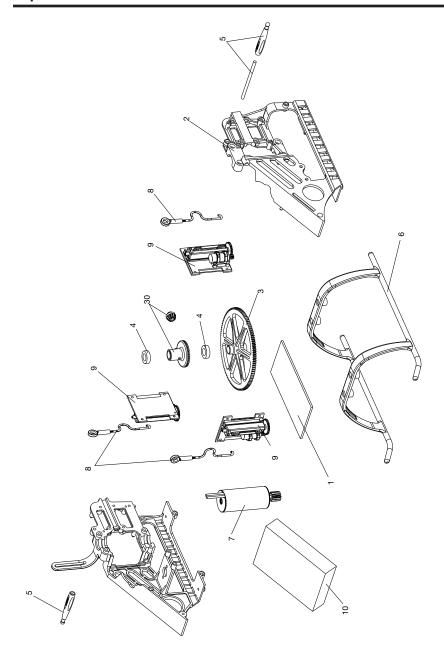
**CAUTION:** Always fly the helicopter with your back to the sun to prevent loss of flight control.

#### Landing

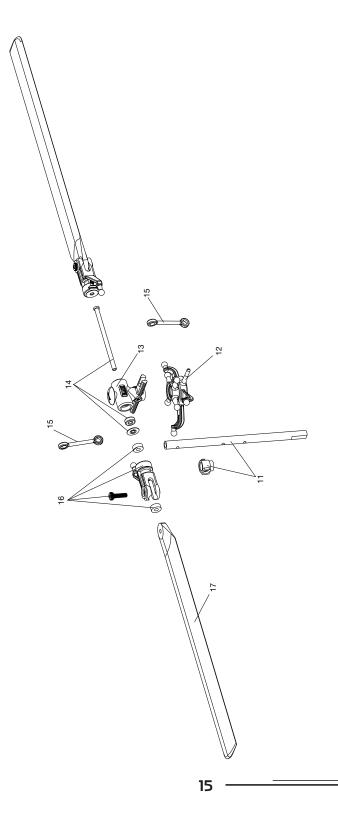
Establish a low level hover. Quickly lower the throttle to land the helicopter.

## Post-Flight Inspections and Maintenance

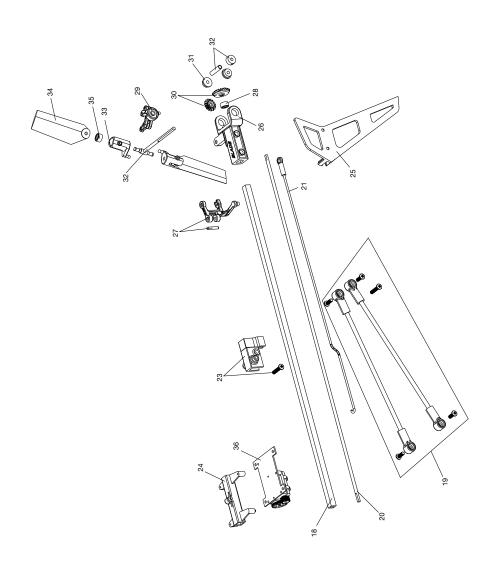
Cleaning	Disconnect the battery before cleaning the helicopter. Use a soft brush or a dry, lint-free cloth to remove dust and debris.
Bearings	Replace ball bearings on the helicopter when they do not rotate freely.
Wiring	Make sure the wiring is away from all moving parts. Replace damaged wiring or loose connectors.
Fasteners	Make sure there are no loose fasteners or connectors. Do not over-tighten metal screws in plastic parts. Tighten screws so the parts are mated together and then turn screw only another 1/8th turn.
Propellers	Make sure rotor blades are not damaged. Damage includes cracks, burrs, chips or scratches. Replace any damaged parts before flying the helicopter again.



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# Parts Listings

	Part #	Description		Part #	Descri
1	BLH3701	Brushless Flybarless 3-in-1 Control	18	BLH3717	Tail Boo
		Unit, RX/ESC/Gyros: 130 X	19	BLH3718	Tail Boo
2	BLH3702	Main FrameSet: 130 X	20	BLH3719	Torque
3	BLH3703	Main Gear: 130 X	21	BLH3720	Tail Link
4	BLH3704	4x7x2 Bearing (2)	23	BLH3721	Tail Boo
5	BLH3705	Canopy Mounts: 130 X			Guide: 1
6	BLH3706	Landing Gear Set: 130 X		BLH3722	Stock C
7	BLH3707	Brushless Main Motor	24	BLH3723	Tail Ser
8	BLH3708	Servo Pushrod Set: 130 X	25	BLH3724	Vertical
9	SPMSH	2.9-Gram Performance Linear Long	26	BLH3725	Tail Cas
	2040L	Throw Servo	27	BLH3726	Tail Rot
10	EFLB 3002S35	300mAh 2S 7.4V 35C Li-Po Battery	28	BLH3727	1.5x4x1
11	BLH3709	Carbon Fiber Main Shaft w/Collar:	29	BLH3728	Tail Rot 130 X
12	BLH3710	Complete Precision Swashplate:	30	BLH3729	Tail Gea
		130 X	31	BLH3730	1.5x4x2
13	BLH3711	Main Rotor Hub: 130 X	32	BLH3731	Tail Sha
14	BLH3712	Feathering Spindle w/O-Rings, Bushings:130 X	33	BLH3732	Tail Rot
15	BLH3713	Rotor Head Linkage Set (8): 130 X	34	BLH3733	Tail Rot
16	BLH3714	Main Blade Grips with Bearings:	35	BLH3734	1.5x4x2
		130 X		EFLC4000*	AC to 1
	BLH3715	Fast Flight Main Rotor Blade Set: 130 X	36	SPMSH	2.9-Gra
17	BLH3716	Hi-Performance Main Rotor Blade Set: 130 X	*	2040T Actual replace	Servo ment par

	Part #	Description
18	BLH3717	Tail Boom: 130 X
19	BLH3718	Tail Boom Brace/Supports Set: 130 X
20	BLH3719	Torque Tube: 130 X
21	BLH3720	Tail Linkage Pushrod: 130 X
23	BLH3721	Tail Boom Support Mount/ Pushrod Guide: 130 X
	BLH3722	Stock Canopy: 130 X
24	BLH3723	Tail Servo Boom Mount: 130 X
25	BLH3724	Vertical Fin: 130 X
26	BLH3725	Tail Case Set: 130 X
27	BLH3726	Tail Rotor Pitch Lever Set: 130 X
28	BLH3727	1.5x4x1.12 Bearing (2)
29	BLH3728	Tail Rotor Pitch Control Slider Set: 130 X
30	BLH3729	Tail Gears: 130 X
31	BLH3730	1.5x4x2 Flanged Bearing (2)
32	BLH3731	Tail Shaft w/Hub,Collar: 130 X
33	BLH3732	Tail Rotor Blade Grip/Holder Set: 130 X
34	BLH3733	Tail Rotor Blade Set: 130 X
35	BLH3734	1.5x4x2 Bearing (2)
	EFLC4000*	AC to 12VDC, 1.5-Amp Power Supply
36	SPMSH 2040T	2.9-Gram Performance Linear Tail Servo

<sup>\*</sup> Actual replacement part may vary from item included.

# **Optional Parts**

Part #	Description
BLH37150R	Fast Flight Main Rotor Blade Set, Orange: 130 X
BLH3715GR	Fast Flight Main Rotor Blade Set, Green: 130 X
BLH3715YE	Fast Flight Main Rotor Blade Set, Yellow: 130 X
BLH3735	Optional Metal Bevel Gears: 130 X
BLH37160R	High-Performance Main Rotor Blade Set, Organge: 130 X
BLH3716GR	High-Performance Main Rotor Blade Set, Green: 130 X
BLH3716YE	High-Performance Main Rotor Blade Set, Yellow: 130 X
BLH37330R	Tail Rotor Blade Set, Orange: 130 X

Part #	Description
BLH3733GR	Tail Rotor Blade Set, Green: 130 X
BLH3733YE	Tail Rotor Blade Set, Yellow: 130 X
EFLC3025	Celectra 80W AC/DC Multi-Chemistry Battery Charger
	DX8 DSMX Transmitter Only
	DX7s DSMX Transmitter Only
	DX6i DSMX 6-Channel Transmitter Only
EFLA7001UM	Charger Plug Adapter THP
EFLA700UM	Charger Plug Adapter EFL
BLH3722A	Blue/White Option Canopy: 130 X
BLH3722B	Red/Yellow Option Canopy: 130 X

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# Troubleshooting Guide

Problem	Possible Cause	Solution
130 X control response is inconsistent or requires extra trim to neutralize movement	Control trim is not centered	Disconnect the flight battery, center the control trim and re-initialize the Helicopter
	Throttle too high and/or throttle trim is too high	Reset controls with the throttle stick and throttle trim at the lowest setting
130 X will not respond to throttle	130 X moved during initialization	Disconnect the flight battery and re-initialize the 130 X while keeping the Helicopter from moving
	Throttle channel is reversed	Disconnect flight battery, reverse the throttle channel on the transmitter, reconnect flight battery
130 X does not function and smells burnt after connecting the flight battery	Flight battery connected with the wrong polarity	Replace the 3-in-1 board. Connect the flight battery noting proper polarity
	Flight battery charge is low	Completely recharge the flight battery
	Inadequate power to flight battery charger	Make sure the AC power supply, charger and adapter cord are connected
130 X has reduced flight time or is underpowered	Flight battery is damaged	Replace the flight battery and follow the flight battery instructions
	Flight conditions might be too cold	Make sure the battery is warm (room temperature) before use
LED on receiver flashes rapidly and aircraft will not respond to transmitter (during binding)	Transmitter too near aircraft during binding process	Power off the transmitter. Move the transmitter a larger distance from the aircraft. Disconnect and reconnect the flight battery to the aircraft. Follow the binding instructions
LED on the receiver flashes	Less than a 5-second wait between first powering on the transmitter and connecting the flight battery to the 130 X	Leave the transmitter powered on. Disconnect and reconnect the flight battery to the 130 X
rapidly and the 130 X will not respond to the transmitter (after binding)	The 130 X is bound to a different model memory (ModelMatch <sup>TM</sup> transmitters only)	Select the correct model memory on the transmitter. Disconnect and reconnect the flight battery to the 130 X
	Flight battery or transmitter battery charge is too low	Replace or recharge batteries
	Flybarless unit has not initialized yet	Wait for the unit to initialize

#### **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.

THE THAN THE EXPRESS WARRANTY ABOVE, HORIZON 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 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 Horizon Hobby 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 Horizon Hobby Service Center.

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

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# **Warranty and Service Contact 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

# **Customer Service Information**

Country of Purchase	Horizon Hobby	Address	Phone Number/Email Address
United States of America	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

## Compliance Information for the European Union

## **Declaration of Conformity**

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(in accordance with ISO/IEC 17050-1)

No. HH2012041201

Product(s): Blade 130 X BNF Item Number(s): BLH3780

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 and EMC Directive 2004/108/EC:

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

EN55022: 2010 EN55024: 2010

EN61000-3-2:2006+A1:2009+A2:2009

EN61000-3-3:2008

EN 60950-1:2006+A1:2010

Signed for and on behalf of: Horizon Hobby, Inc. Champaign, IL USA April 12, 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 make sure 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.

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