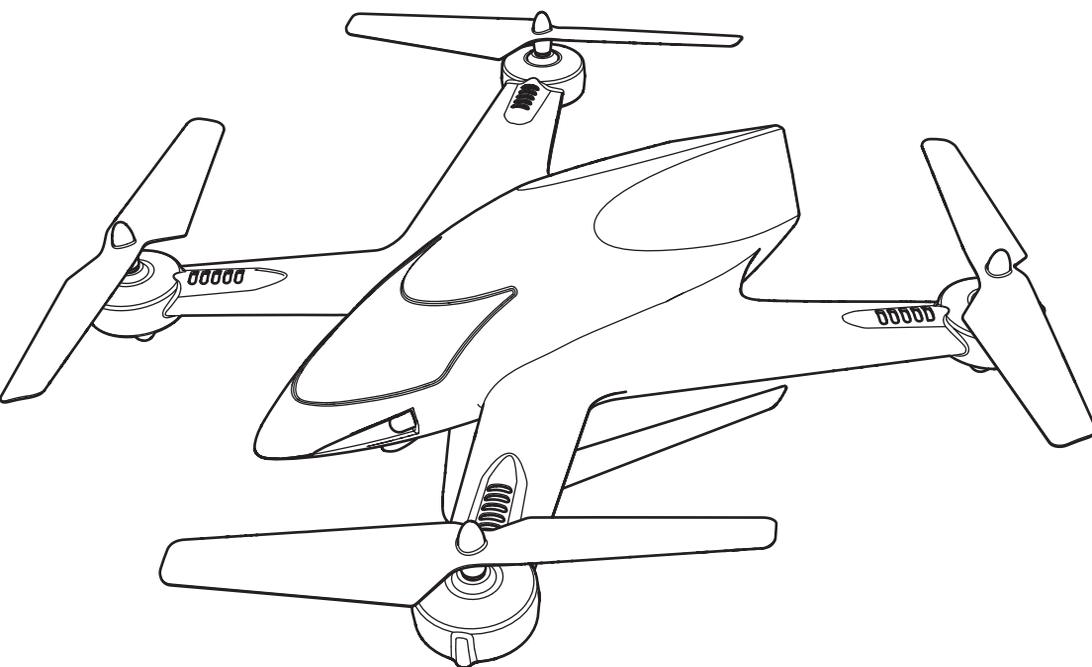


# **BLADE®** **Zeyrok™**

BLH7300  
BLH7360  
BLH7380



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

**SAFE®**  **BNF™**

## NOTICE

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 [horizonhobby.com](http://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.

**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 move the throttle fully down at rotor strike.
- 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.

# BLADE® Zeyrok™

## Table of Contents

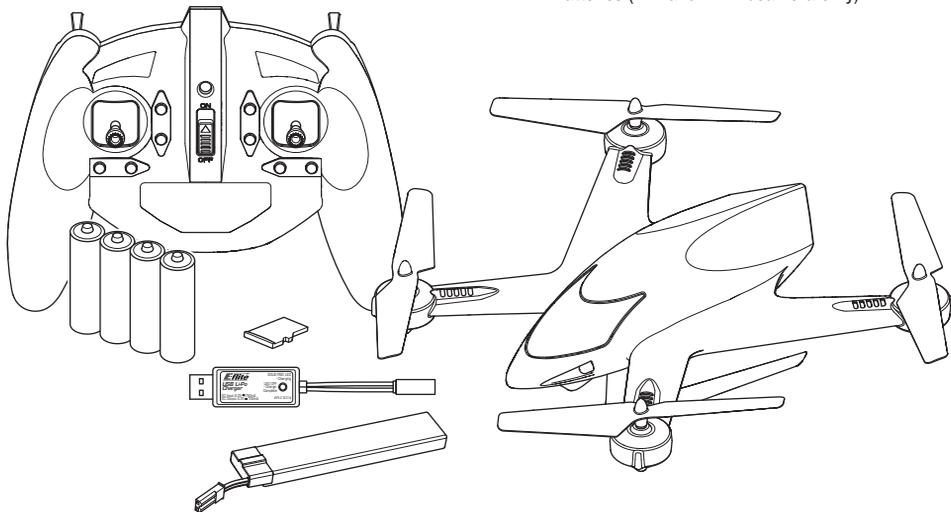
Box Contents .....	3	Flying the Zeyrok™ Quadcopter .....	11
First Flight Preparation .....	4	LED Codes .....	12
Flying Checklist .....	4	Post-Flight Inspection and Maintenance Checklist .....	12
Charging Warnings .....	4	Replacing the Propellers .....	13
Battery Charging .....	4	Drift Calibration .....	13
Installing the Transmitter Batteries (RTF) .....	5	Troubleshooting Guide .....	14
BNF Transmitter Setup .....	5	Exploded View .....	15
Installing the Flight Battery .....	8	Parts Listings .....	15
Transmitter and Receiver Binding .....	8	Optional Parts .....	15
RTF Transmitter Controls .....	9	Limited Warranty .....	16
SAFE® Technology .....	9	Warranty and Service Contact Information .....	17
Understanding the Primary Flight Controls .....	10	FCC Statement .....	17
Installing the Optional Camera (BNF) .....	10	IC Information .....	17
Camera Controls .....	11	Compliance Information for the European Union .....	17
Flight Mode Selection .....	11		

## Specifications

<b>Length</b>	7.8 in (200mm)	<b>Propeller Diameter</b>	5.3 in (135mm)
<b>Width</b>	8.6 in (220mm)	<b>Flying Weight</b>	4.3 oz (122 g)
<b>Height</b>	1.8 in (45mm)		

## Box Contents

- Blade® Zeyrok™ Quadcopter
- 750mAh 1S 3.7V 25C Li-Po Battery
- 700mA 1S Li-Po USB Charger
- 720p/1.3MP Digital Camera (RTF w/camera Only)
- 4GB Micro SD Card and SD Adapter (RTF w/camera Only)
- MLP6 DSMX® SAFE® Transmitter (RTF and RTF w/camera Only)
- 4 AA Batteries (RTF and RTF w/camera Only)



To receive product updates, special offers and more, register your product at [www.bladehelis.com](http://www.bladehelis.com)

## First Flight Preparation

- Remove and inspect contents
- Begin charging the flight battery
- Program your computer transmitter (BNF only)
- Familiarize yourself with the controls
- Install the flight battery in the quadcopter (once it has been fully charged)
- Bind your transmitter
- Find a suitable area for flying

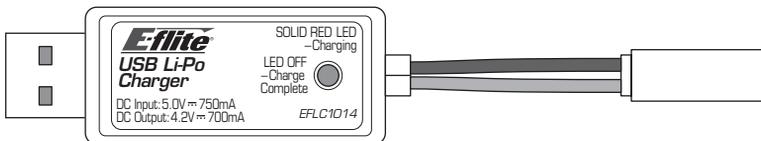
## Charging Warnings



**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.

- **NEVER LEAVE CHARGING BATTERIES UNATTENDED.**
- **NEVER CHARGE BATTERIES OVERNIGHT.**
- 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 battery or model in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.

## Battery Charging



**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.

1. Insert the charger into a USB port.
2. Connect the battery to the charger lead, noting the correct polarity.
3. Always disconnect the flight battery from the charger immediately upon completion of charging.



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



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

## Flying Checklist

- Always turn the transmitter on first**
- Plug the flight battery into the lead from the 3-in-1 ESC
- Allow the receiver and ESC to initialize and arm
- Fly the model
- Land the model
- Unplug the flight battery from the 3-in-1 ESC
- Always turn the transmitter off last**

- Always charge batteries away from flammable materials.
- Always inspect the battery before charging.
- 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 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 or (5–49° C) or place in direct sunlight.

### 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) 750mAh battery takes approximately 60 minutes. The light goes off when the charge is complete.

**CHARGING** (Solid Red)

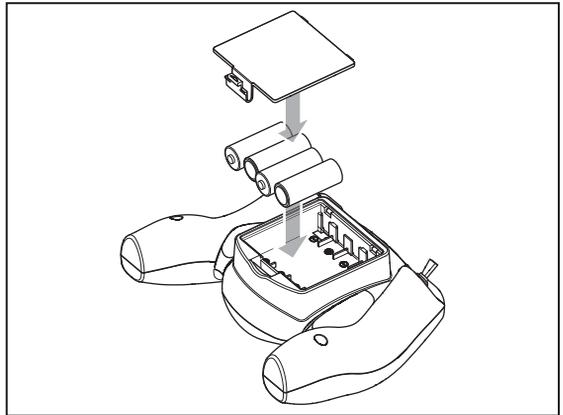
**MAX CHARGE** (OFF)



**CAUTION:** Once charging is complete, immediately remove the battery. Never leave a battery connected to the charger.

## Installing the Transmitter Batteries (RTF)

Replace the transmitter batteries when the transmitter beeps rapidly.



## BNF Transmitter Setup

Program your transmitter before attempting to bind or fly the quadcopter. Transmitter programming values are shown below for the Spektrum DX6i, DX7s, DX6, DX7, DX8, DX9 and DX18.

The files for models using Spektrum™ transmitters with AirWare™ software are also available for download online at [www.spektrumrc.com](http://www.spektrumrc.com).

Your quadcopter is also compatible with Spektrum DXe radios with software version 1.3 or higher. Use the directions below to reverse channel 6, or use the appropriate programming cable and the PC or mobile app to program the DXe. We recommend downloading the Blade® Zeyrok™ DXe model setup available at [www.spektrumrc.com](http://www.spektrumrc.com).

### DXe

To use the DXe transmitter with the Zeyrok quadcopter, channel 6 must be reversed.

*To reverse channel 6:*

1. While powering on the DXe, hold the left and right sticks in the top-inside corners as shown.
2. Re-center the sticks after the transmitter beeps. The LED will flash slowly.
3. To select a channel to reverse, move the right stick to the left or right and allow it to re-center. Move the stick to the right to select the next channel. Move the stick to the left to select the previous channel. The LED will flash rapidly corresponding to the channel selected, as shown in the table. Select channel 6.
4. To reverse the selected channel, move the right stick up or down. The LED will change color to indicate the new channel direction.

The LED will flash **Orange** to indicate the channel is **normal**.

The LED will flash **Red** to indicate the channel is **reversed**.

5. To store the changes, power off the DXe.



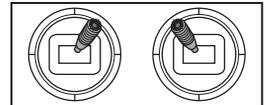
**CAUTION:** During the subsequent power up, always verify the throttle direction is correct and keep clear of the motor and rotor blades. Failure to do so may result in injury or damage to the product.

After reversing channel 6, bind the transmitter and quadcopter normally.

Flight modes are controlled by the Flight Mode switch.

If you are programming your DXe using the PC or mobile app, make sure the "Transmitter Channels" value is set to the default of 7. If for any reason this value is changed to 9, the Zeyrok will bind to the DXe, but will not respond to control inputs.

If your DXe was included in another Blade Ready To Fly (RTF) helicopter, the transmitter software will have to be updated using the appropriate programming cable and either the PC or mobile app available at [www.spektrumrc.com](http://www.spektrumrc.com). Please note, the switch configuration used for DXe transmitters included with the Blade 230 S RTF and Micro AH-64 Apache RTF varies from the standard DXe layout.



LED Flashes	Channel
1	1-Throttle
2	2-Aileron
3	3-Elevator
4	4-Rudder
5	5-Flight Mode
6	6-Camera
7	7-Flaps
8	8-Aux Channel

## DX6i

SETUP LIST	
Model Type	Acro
<b>REVERSE</b>	
Channel	Direction
THRO	N
AILE	N
ELEV	N
RUDD	N
GEAR	R
FLAP	N
<b>Modulation Type</b>	
AUTO DSMX-ENABLE	
<b>D/R COMBI</b>	
D/R SW	AILE
<b>Timer</b>	
Down Timer	5:00
Switch	THR CUT

ADJUST LIST			
<b>TRAVEL ADJ</b>			
Channel	Travel		
THRO	100/100		
AILE	100/100		
ELEV	100/100		
RUDD	100/100		
GEAR	100/100		
FLAP	100/100		
<b>FLAPS</b>			
	FLAP	ELEV	
NORM	↑100	0	
LAND	↓100	0	
<b>D/R &amp; Expo</b>			
Chan	Sw Pos	D/R	Expo*
AILE	0	100	INH
	1	75	INH
ELEV	0	100	INH
	1	75	INH
RUDD	0	100	INH
	1	75	INH
<b>Mixing</b>			
MIX 1		ACT	
GEAR > GEAR		ACT	
RATE	D 0%	U -100%	
SW	GEAR	TRIM - INH	
MIX 2		ACT	
GEAR > GEAR		ACT	
RATE	D 0%	U +100%	
SW	ELE D/R	TRIM - INH	

### Camera Control/Continuous Flip\*\*

#### Flap Switch

Set the switch position to 0 for normal. Set the switch to pos 1 until the rear LEDs slowly flash, then set it back to 0 to start recording video. To stop recording, set the switch to pos 1 until the rear LEDs glow solid, then set it back to pos 0. Quickly cycle the switch from pos 0 to pos 1 and back two times to take a photo.

Always return the flap switch to pos 0.

\*\* If no camera is installed, switching the flap switch to pos 1 while in FMO enables the continuous flip feature (see the *Flight Mode Selection* section for details).

### Flight Mode Operation

Gear Sw: Pos 0, Elev D/R Sw: 0 or 1 = Stability Mode (internal quadcopter LED Green)

Gear Sw: Pos 1, Elev D/R Sw: 0 = Stagility Mode (internal quadcopter LED Yellow)

Gear Sw: Pos 1, Elev D/R Sw: 1 = Agility Mode (internal quadcopter LED Red)

## DX7s

SYSTEM SETUP	
Model Type	ACRO
<b>SW Select</b>	
Trainer	Aux 1
Flap	Gear
All Others	INH

FUNCTION LIST						
<b>Servo Setup</b>						
Chan	Travel	Reverse		Chan	Travel	Reverse
THR	100/100	Normal		GER	100/100	Normal
AIL	100/100	Normal		AX1	100/100	Reverse
ELE	100/100	Normal		AX2	100/100	Normal
RUD	100/100	Normal				
<b>D/R &amp; Expo</b>						
Chan	Switch Pos (FLAP)	D/R	Expo*			
AILE	0	100/100	0			
	1	100/100	0			
	2	75/75	0			
ELEV	0	100/100	0			
	1	100/100	0			
	2	75/75	0			
RUDD	0	100/100	0			
	1	100/100	0			
	2	75/75	0			
<b>Timer</b>						
Mode	Count Down					
Time	5:00 Tone					
Start	Throttle Out					
Pos	25%					

### Camera Control/ Continuous Flip\*\*

#### Bind / I Button

Press twice rapidly (within 2 seconds) = still photo (rear LEDs blink once)

Press and hold 3 seconds = start/stop video (rear LEDs slowly flash while recording)

\*\* If no camera is installed, pressing and holding the Bind button while in FMO enables the continuous flip feature (see the *Flight Mode Selection* section for details).

### Flight Mode Operation

FLAP Sw: Pos 0 = Stability Mode

Pos 1 = Stagility Mode

Pos 2 = Agility Mode

\* Use of "Expo" is not necessary for successful flight. The pilot may adjust this setting to tailor the sensitivity around neutral if desired.

## DX8

SYSTEM SETUP	
Model Type	ACRO
SW Select	
Trainer	Aux 1
F Mode	Gear
All Others	INH

FUNCTION LIST							
Servo Setup							
Chan	Travel	Reverse	Chan	Travel	Reverse		
THR	100/100	Normal	GER	100/100	Normal		
AIL	100/100	Normal	AX1	100/100	Reverse		
ELE	100/100	Normal	AX2	100/100	Normal		
RUD	100/100	Normal					
D/R & Expo							
Chan	Switch Pos (AIL D/R)	D/R	Expo*	Chan	Switch Pos (AIL D/R)	D/R	Expo*
AILE	0	100/100	0	RUDD	0	100/100	0
	1	100/100	0		1	100/100	0
	2	75/75	0		2	75/75	0
ELEV	0	100/100	0				
	1	100/100	0				
	2	75/75	0				
Timer							
Mode	Count Down						
Time	5:00 Tone						
Start	Throttle Out						
Pos	25%						

### Camera Control/Continuous Flip\*\*

Bind / I Button

Press twice rapidly (within 2 seconds) = still photo (rear LEDs blink once)

Press and hold 3 seconds = start/stop video (rear LEDs slowly flash while recording)

\*\* If no camera is installed, pressing and holding the Bind button while in FMO enables the continuous flip feature (see the *Flight Mode Selection* section for details).

### Flight Mode Operation

FMODE Sw: Pos 0 = Stability Mode

Pos 1 = Stagility Mode

Pos 2 = Agility Mode

## DX6, DX7 (Gen 2), DX9, DX18

SYSTEM SETUP	
Model Type	Airplane
F-Mode Setup	
Switch 1	Switch B
Switch 2	Inhibit
Channel Assign	
Channel Input	
1 Throttle	N/A
2 Aileron	N/A
3 Elevator	N/A
4 Rudder	N/A
5 Gear	B
6 AUX 1	I

FUNCTION LIST						
Servo Setup						
Chan	Travel	Reverse	Chan	Travel	Reverse	
THR	100/100	Normal	AX1	100/100	Reverse	
AIL	100/100	Normal	AX2	100/100	Normal	
ELE	100/100	Normal	AX3	100/100	Normal	
RUD	100/100	Normal	AX4	100/100	Normal	
GER	100/100	Normal				
D/R & Expo						
Chan	Switch (F) Pos		D/R	Expo*	Timer	
	DX6	DX7, 9, 18			Mode	Count Down
AILE	0	0	100/100	0	Time	5:00
	1	1	100/100	0	Start	Throttle Out
	1	2	75/75	0	Over	25%
ELEV	0	0	100/100	0	One Time	Inhibit
	1	1	100/100	0		
	1	2	75/75	0		
RUDD	0	0	100/100	0		
	1	1	100/100	0		
	1	2	75/75	0		

### Camera Control/Continuous Flip\*\*

Bind / I Button

Press twice rapidly (within 2 seconds) = still photo (rear LEDs blink once)

Press and hold 3 seconds = start/stop video (rear LEDs slowly flash while recording)

\*\* If no camera is installed, pressing and holding the Bind button while in FMO enables the continuous flip feature (see the *Flight Mode Selection* section for details).

### Flight Mode Operation

Sw B: Pos 0 = Stability Mode

Pos 1 = Stagility Mode

Pos 2 = Agility Mode

\* Use of "Expo" is not necessary for successful flight. The pilot may adjust this setting to tailor the sensitivity around neutral if desired.

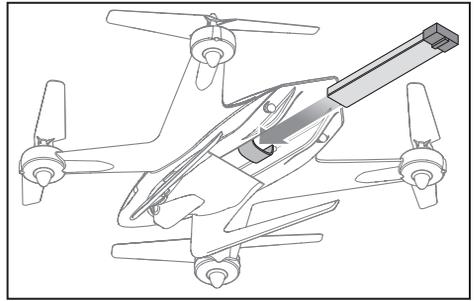
## Installing the Flight Battery

1. Lower the throttle stick to the lowest position and center all trims.
2. Set the Flight Mode Switch to Stability Mode (FM0).
3. Power ON the transmitter.
4. Slide the battery into the back of the quadcopter, all of the way forward through the battery loop as shown.
5. Connect the power lead to the battery, noting the correct polarity.



**CAUTION:** Connecting the battery to the control board with reversed polarity will cause damage to the control board, the battery or both. Damage caused by incorrectly connecting the battery is not covered under warranty.

6. Place the quadcopter upright on a flat surface and leave it still until the LEDs glow solid white in the front and red in the rear, indicating the quadcopter is ready for flight. If the LEDs continuously pulse slowly, no valid transmitter signal has been acquired. Proceed to the *Transmitter and Receiver Binding* section to bind the quadcopter and transmitter.  
If the LEDs alternately flash front and rear, the battery is below 3.5V. The quadcopter will not allow takeoff. Charge the battery and re-install.



If you experience issues during initialization, refer to the Troubleshooting Guide at the back of the manual.



**CAUTION:** Always disconnect the Li-Po battery from the aircraft 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.

## Transmitter and Receiver Binding

Your RTF transmitter comes prebound to the model. If you need to re-bind, follow the directions below.

### MLP6 Binding Procedure (RTF)

1. Disconnect the flight battery from the quadcopter.
2. Center all trims on your transmitter. The trims are centered when the transmitter emits a longer tone when pressing the trim buttons.
3. Power off the transmitter and move the throttle stick to the down/off position.
4. Install the flight battery in the quadcopter. Hold the quadcopter inverted until the LEDs flash rapidly.
5. Set the quadcopter upright.
6. Push in and hold down the left stick (you will hear a 'click') while powering on the transmitter.
7. Release the left stick. The transmitter will beep and the power LED will blink.
8. The quadcopter is bound when the onboard LEDs stop flashing and then glow solid.
9. Disconnect the flight battery and power the transmitter off.

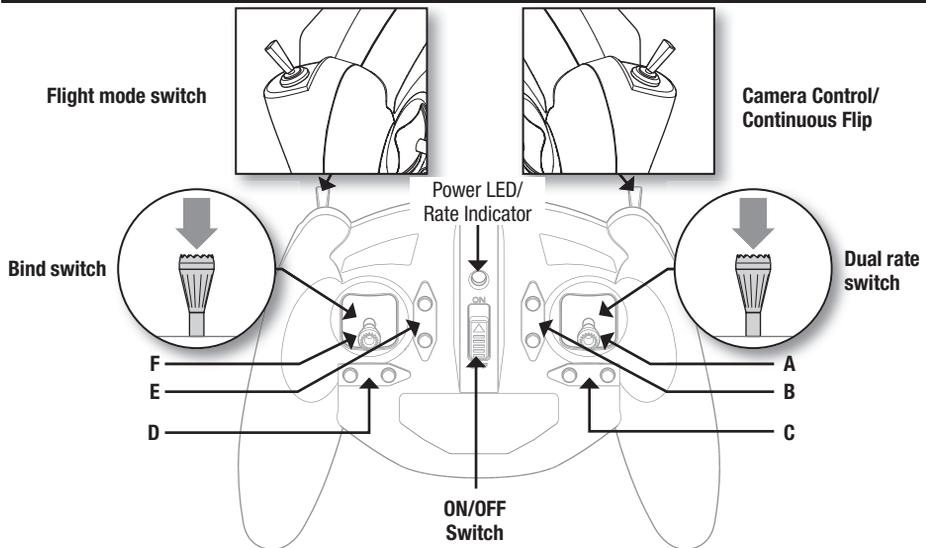
To bind or re-bind your quadcopter to your chosen transmitter, please follow the directions below.

### General Binding Procedure (BNF)

1. Refer to the Transmitter Setup section to correctly setup your transmitter.
2. Lower the throttle stick to the lowest position and center all trims on your transmitter.
3. Power off the transmitter and move all switches to the 0 position.
4. Install the flight battery in the quadcopter. Hold the quadcopter inverted until the LEDs flash rapidly.
5. Set the quadcopter upright.
6. Put the transmitter into bind mode while powering on the transmitter.
7. The quadcopter is bound when the onboard LEDs stop flashing and then glow solid.
8. Disconnect the flight battery and power the transmitter off.

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. For a list of compatible DSM® transmitters, please visit [www.bindnfly.com](http://www.bindnfly.com).

## RTF Transmitter Controls



### Adjusting Flight Trims

The transmitter beeps each time the trim buttons are pressed. The middle or neutral trim position is heard as a longer tone. The end of the trim range is indicated by no tone when the trim button is pushed.

### Dual Rate Selection

The control sensitivity can be changed by pressing and releasing the right control stick. The LED on the transmitter will show solid for high sensitivity (default) and flashing for low sensitivity.

	A	B	C	D	E	F
<b>Mode 1</b>	<b>Aileron</b> (Left/Right) <b>Throttle</b> (Up/Down)	<b>Throttle</b> <b>Trim</b>	<b>Aileron</b> <b>Trim</b>	<b>Rudder</b> <b>Trim</b>	<b>Elevator</b> <b>Trim</b>	<b>Rudder</b> (Left/Right) <b>Elevator</b> (Up/Down)
<b>Mode 2</b>	<b>Aileron</b> (Left/Right) <b>Elevator</b> (Up/Down)	<b>Elevator</b> <b>Trim</b>	<b>Aileron</b> <b>Trim</b>	<b>Rudder</b> <b>Trim</b>	<b>Throttle</b> <b>Trim</b>	<b>Rudder</b> (Left/Right) <b>Throttle</b> (Up/Down)

## SAFE Technology

Revolutionary SAFE® (Sensor Assisted Flight Envelope) technology uses an innovative combination of multi-axis sensors and software that allows model aircraft to know its position relative to the horizon. This spatial awareness is utilized to create a controlled flight envelope the aircraft can use to maintain a safe region of bank and pitch angles so you can fly more safely. Far beyond stability, this level of protection offers multiple modes so the pilot can choose to develop his or her skills with a greater degree of security and flight control that always feels crisp and responsive.

SAFE® technology delivers:

- Flight envelope protection you can enable at the flip of a switch.
- Multiple modes let you adapt SAFE® technology to your skill level instantly.

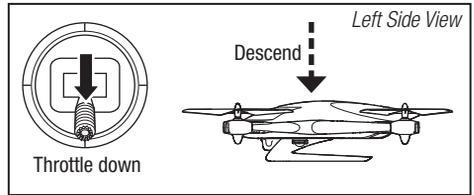
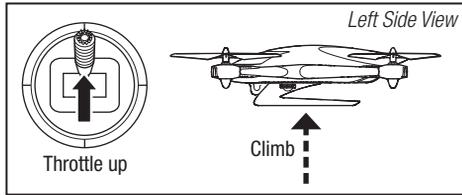
Best of all, sophisticated SAFE® technology doesn't require any work to enjoy. Every aircraft with SAFE® installed is ready to use and optimized to offer the best possible flight experience.

*FlySAFERC.com*

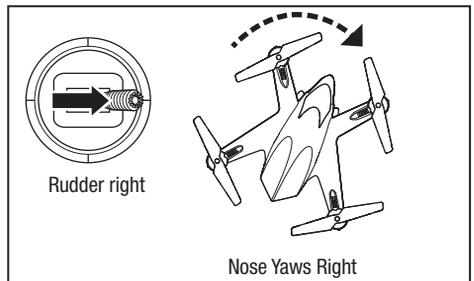
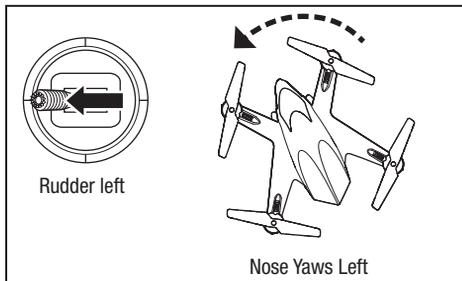
## Understanding the Primary Flight Controls

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

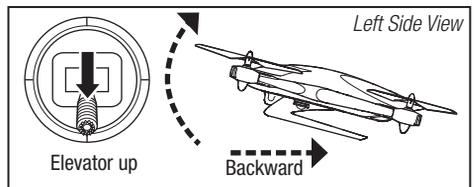
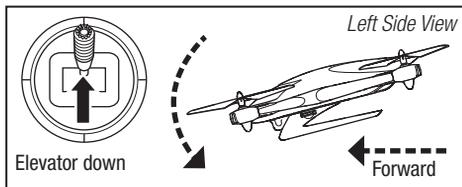
### Throttle



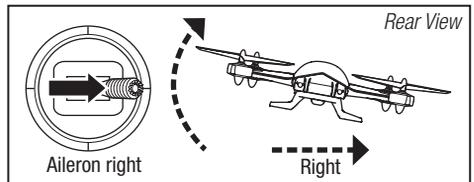
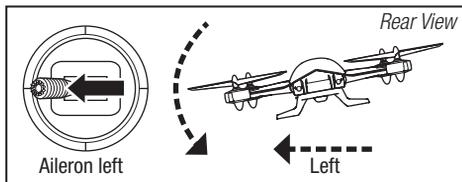
### Rudder



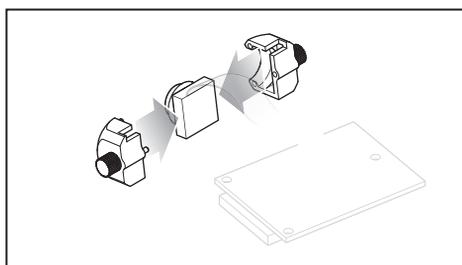
### Elevator



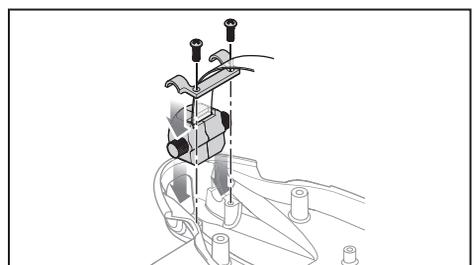
### Aileron



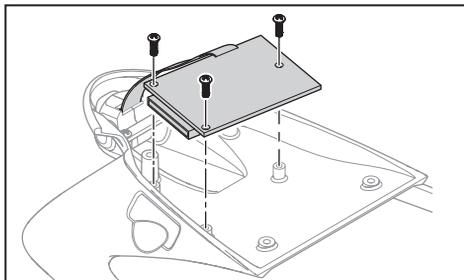
## Installing the Optional Camera (BNF)



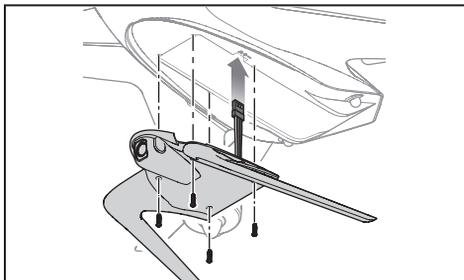
1. Install the camera carrier halves around the camera.



2. Install the camera carrier to the landing gear using 2 screws. Ensure the ribbon cable does not get pinched by the carrier clamp.



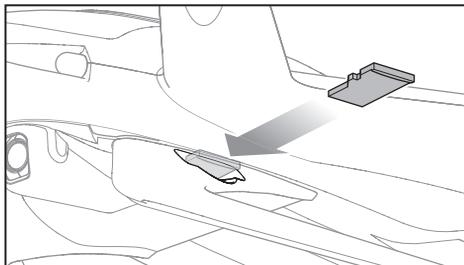
3. Attach the camera control board to the landing gear using 3 screws.



4. Connect the camera control cable to the quadcopter. The black, negative terminal should go toward the rear of the quadcopter. Attach the landing gear to the quadcopter using 4 screws.

## Camera Controls

Insert a micro SD card into the slot in the quadcopter until it locks. Make sure the metal contact is facing up and the notch in the card is facing forward as in the illustration. Tweezers or small pliers may be necessary to install and remove the micro SD card.



Power on the transmitter and quadcopter normally.

### MLP6 RTF Transmitter users:

To take a still photo, quickly pull and release the camera control switch twice. The rear LEDs on the quadcopter will blink once as the camera takes the photo.

To start/stop recording video, pull and hold the camera control switch for approximately 3 seconds. The rear LEDs will begin flashing slowly, indicating the camera is recording video. To stop the recording, pull and hold the camera control switch for 3 seconds. The rear LEDs will glow solid once again.

### BNF Transmitter users:

Follow the instructions for your transmitter in the *Transmitter Setup* section to control the camera.

### To retrieve the video and photos from the camera:

Press the micro SD card in and release it to unlock. Pull the card out from the quadcopter. Insert the card in the micro to SD card adapter. The micro SD card can now be read by any SD capable device.

## Flight Mode Selection

- In **Stability Mode (FM0)**, the bank angle is limited. When the sticks are released, the quadcopter will return to level flight. If the camera is not installed on the quadcopter, the continuous flip feature is available in Stability Mode. To use the continuous flip feature, hold the continuous flip button/switch and move the cyclic stick in any direction. The quadcopter will begin flipping in the chosen direction when the cyclic stick is moved beyond 85% travel. Release the flip button/switch to stop the rotation. Given enough altitude, the quadcopter will self level and the bank angle limits will be active. If the cyclic stick is held after releasing the flip button, the quadcopter will return to upright flight in the direction chosen.

**NOTICE:** When using the continuous flip feature, always allow the quadcopter enough altitude to recover.

- In **Stagility Mode (FM1)**, the bank angle is limited up until 85% stick travel. Beyond 85% stick travel, the bank angle is unlimited to allow for more advanced aerobatics. If the sticks are released, the quadcopter will return to level flight.
- In **Agility Mode (FM2)**, the quadcopter has no bank angle limits, and will not return to level flight if the sticks are released. Use rates and expo to tune the performance according to your flying style.

Refer to the *Transmitter Setup Table* for transmitter switch selection and specific setup information.

## Flying the Zeyrok™ Quadcopter

Consult your local laws and ordinances before choosing a location to fly your aircraft.

We recommend flying your aircraft outside in calm winds or inside 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.

### Takeoff

Select Stability Mode (FM0). Slowly increase the throttle until the motors start and the quadcopter begins to lift off. Continue raising the throttle until the quadcopter is approximately 2 ft. (600mm) off the ground. Adjust the trims so the model flies as desired. Once the trims are adjusted, begin flying the model.

The quadcopter should not need large trim adjustments. If excessive trim is required to sustain a reasonable hover, perform the *Drift Calibration*.

Making small corrections on the transmitter, try to hold the quadcopter in one spot. If flying in calm winds, the model should require almost no corrective inputs. After moving the cyclic stick and returning it to center, the model should level itself. The quadcopter may continue to move due to inertia. Move the cyclic stick in the opposite direction to stop the movement.

## Flying

With your quadcopter maintaining a stable low-level hover, practice using the rudder, elevator and aileron controls to familiarize yourself with the machine's responses to control inputs. Remember to keep the control inputs as minimal as possible.

When you are comfortable with basic flight, you may explore the different flight modes and functions explained in the *Flight Mode Selection* section of this manual. The different flight modes are accessed using the Flight Mode switch on the MLP6 or the controls programmed in the BNF *Transmitter Setup* section.

Releasing the sticks in either of the Stability Modes will allow the quadcopter to level itself. If you become disoriented, slowly lower the throttle stick to land softly.

**Tip:** If a greater bank angle is desired in Stability Mode, refer to the *Transmitter Setup* section and increase the "Travel" values of the rudder, aileron and elevator channels in your transmitter to over 100%.

## LED Codes

### External Quadcopter LEDs

*Single rapid flash* = Power on

*Rapid flash, front and rear* = Bind mode

*Slow flashing, front and rear* = Looking for signal/Loss of signal

*Solid, front and rear* = Ready for flight

*Alternating front and rear flashing* = Battery below 3.5V (LVC). Will not allow takeoff. If it occurs during flight, power is limited to allow landing.

If for any reason the quadcopter loses the transmitter signal, the quadcopter will enter a "panic" state. The quadcopter will self-level while throttling down for 5 seconds. After 5 seconds, the quadcopter will disarm and power to the motors will be removed.

Typical flight time for the included battery is approximately 10 minutes.

## Low Voltage Cutoff (LVC)

LVC decreases the power to the motors when the battery voltage gets low. The LEDs on the quadcopter will alternately flash, front and rear, indicating low battery voltage. Full throttle control is maintained for approximately 5 seconds, after which motor speed is ramped down for the next 5 seconds. When the LEDs indicate low voltage, land immediately.

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

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

LVC does not prevent the battery from over-discharge during storage.

## Landing

To land, slowly decrease the throttle while in a low-level hover. After landing, lower the throttle completely to stop the motors. Disconnect and remove the battery from the quadcopter to prevent over discharge. During storage, make sure the battery charge does not fall below 3V per cell.

*Solid front, slow flashing rear* = Video recording

*Solid front, rear single flash off* = Photo capture

### RTF Transmitter

*Solid* = High rate selected (default)

*Flashing* = Low rate selected

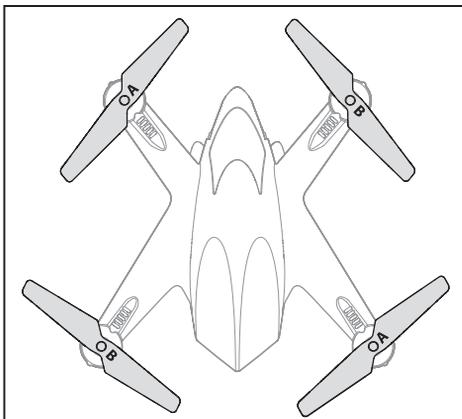
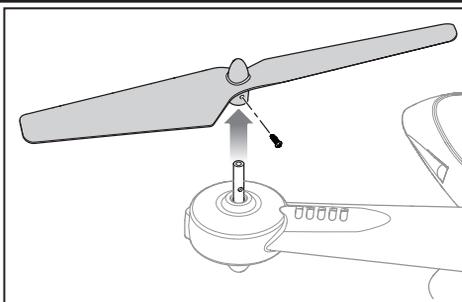
## Post-Flight Inspection and Maintenance Checklist

✓	
<b>Cleaning</b>	Make sure the battery is not installed before cleaning. Remove dust and debris with a soft brush or a dry, lint-free cloth.
<b>Motors</b>	Replace the motor when the model will not fly steady or veers off when doing a climb out.
<b>Wiring</b>	Make sure the wiring does not block moving parts. Replace damaged wiring and loose connectors.
<b>Fasteners</b>	Make sure there are no loose screws, other fasteners or connectors. Do not over-tighten metal screws in plastic parts. Tighten screws so the parts are mated together, then turn the screw only 1/8th of a turn more. Do not use threadlock on or near plastic parts.
<b>Propellers</b>	Make sure there is no damage to the propellers or other parts that move at high speed. Damage to these parts includes cracks, burrs, chips or scratches. Replace damaged parts before flying.

## Replacing the Propellers

Follow the steps below to replace any damaged propellers:

1. Remove the screw at the base of the propeller and pull the propeller straight up.
2. Note the propellers and the quadcopter are marked "A" or "B" to show the proper location for each propeller, as shown in the illustration. Replace the propeller making sure to line up the screw holes in the propeller with the hole in the prop shaft.
3. Replace the screw at the base of the propeller.  
**Do not use thread lock on the screws.**  
**Do not overtighten the screws.**



## Drift Calibration

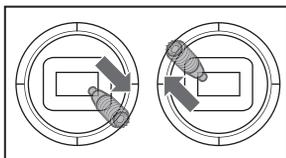
The quadcopter has been calibrated at the factory before shipment, but it is possible that a crash will cause mechanical distortion of the frame, resulting in a slight drift in Stability and Stagility modes. In this situation, please follow the calibration procedure below.

Before beginning the calibration procedure, fully charge the flight battery and ensure the quadcopter and transmitter are bound properly, per the binding instructions.

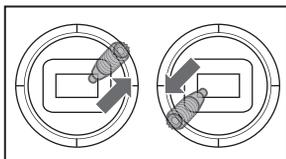
*To Calibrate the Zeyrok quadcopter:*

1. Power on the transmitter and quadcopter normally.
2. Set the transmitter to flight mode 1.

3. Refer to the illustrations at right. Depending on which control layout mode your transmitter uses, move the control sticks to the positions shown and press the camera button until the LEDs on the quadcopter go off. (approximately 5 seconds).



**Mode 2**



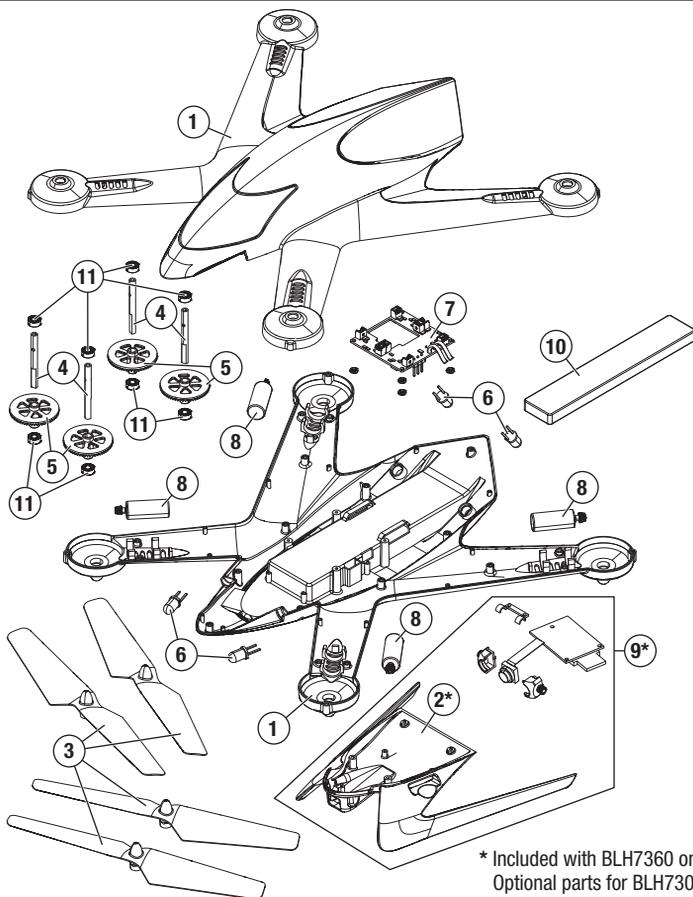
**Mode 1**

4. Release the sticks and camera button.
5. Do not move the quadcopter.
6. The rear LEDs will glow solid red when the calibration is complete and successful. If the rear LEDs flash continuously, the calibration was not successful. Power off the quadcopter and attempt the calibration procedure again.
7. Restart the quadcopter normally.

## Troubleshooting Guide

Problem	Possible Cause	Solution
Quadcopter 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
Quadcopter will not respond to throttle	Throttle too high and/or throttle trim is too high	Reset controls with the throttle stick and throttle trim at the lowest setting
	Aileron, elevator or rudder trims are not centered	Center all trims
Quadcopter has reduced flight time or is underpowered	Flight battery charge is low	Completely recharge the flight battery
	Inadequate power to flight battery charger	Use a different power source for the charger
	Flight battery is damaged	Replace the flight battery and follow the flight battery instructions
	Flight conditions too cold	Make sure the battery is warm (room temperature) before use
Difficulty 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 Quadcopter. Follow the binding instructions
	Bind switch or button was not held while transmitter was powered on	Power off transmitter and repeat bind process
	Quadcopter or transmitter is too close to large metal object, wireless source or another transmitter	Move quadcopter and transmitter to another location and attempt binding again
Difficulty connecting (after binding)	Less than a 5-second wait between first powering on the transmitter and powering on the quadcopter	Leave the transmitter powered on. Power off the quadcopter and power it back on
	The quadcopter is bound to a different model memory (ModelMatch™ transmitters only)	Select the correct model memory on the transmitter. Disconnect and reconnect the flight battery to the quadcopter
	Flight battery or transmitter battery charge is too low	Replace or recharge batteries
	Quadcopter or transmitter is too close to large metal object, wireless source or another transmitter	Move quadcopter and transmitter to another location and attempt connecting again
Crashes immediately upon lift-off	Propellers in wrong locations or incorrect flight mode selected	Ensure propeller direction and motor direction are correct
	Aileron, elevator or rudder are reversed in the transmitter	Ensure aileron, elevator or rudder are not reversed
Quadcopter does not complete initialization	Quadcopter moved during initialization	Allow the quadcopter to sit still until it initializes completely
Propeller will not spin or spins roughly	Stripped drive gear	Replace affected drive gear
	Pinion gear out of adjustment	Adjust the pinion gear mesh

## Exploded View



\* Included with BLH7360 only.  
Optional parts for BLH7300 and BLH7380.

## Parts Listings

Part #	Description
1	BLH7301 Main Frame
2	BLH7302 Landing Gear (included with BLH7360)
3	BLH7303 Prop Set, Yel, Grn, Blk (6)
4	BLH7304 Prop Shaft Set (4)
5	BLH7305 Drive Gear Set (4)
6	BLH7306 LED Set
7	BLH7307 3-in-1 Control Unit

Part #	Description
8	BLH7308 Motors (2)
9	BLH7309 Camera w/landing gear (included with BLH7360)
10	EFLB7501S25 750mAh 1S 3.7V 25C LiPo Battery
11	BLH1115 Bearings
	BLH7310 Decal Sheet
	EFLC1014 1S USB Li-Po Charger, 700mA, JST

## Optional Parts

Part #	Description
BLH7302	Landing Gear
BLH7309	Camera w/landing gear
	DXe DSMX Transmitter Only
	DX6 DSMX 6-Channel Transmitter Only
	DX6i DSMX 6-Channel Transmitter Only

Part #	Description
	DX7 DSMX 7-Channel Transmitter Only
	DX8 DSMX 8-Channel Transmitter Only
	DX9 DSMX 9-Channel Transmitter Only
	DX18 DSMX 18-Channel Transmitter Only

## 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, (vi) Product not compliant with applicable technical regulations, or (vii) use that violates any applicable laws, rules, or 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 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](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.

**NOTE:** Do not ship Li-Po batteries to Horizon. If you have any issue with a Li-Po 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).

**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.**

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## Warranty and Service Contact Information

Country of Purchase	Horizon Hobby	Contact Information	Address
United States of America	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/ RequestForm/	4105 Fieldstone Rd Champaign, Illinois, 61822 USA
	Horizon Product Support (Product Technical Assistance)	productsupport@horizonhobby.com 877-504-0233	
	Sales	websales@horizonhobby.com 800-338-4639	
United Kingdom	Service/Parts/Sales: Horizon Hobby Limited	sales@horizonhobby.co.uk	Units 1-4, Ployters Rd, Staple Tye Harlow, Essex, CM18 7NS, United Kingdom
		+44 (0) 1279 641 097	
Germany	Horizon Technischer Service Sales: Horizon Hobby GmbH	service@horizonhobby.de	Christian-Junge-Straße 1 25337 Elmshorn, Germany
		+49 (0) 4121 2655 100	
France	Service/Parts/Sales: Horizon Hobby SAS	infofrance@horizonhobby.com	11 Rue Georges Charpak 77127 Lieusaint, France
		+33 (0) 1 60 18 34 90	

### FCC Statement

This equipment has been tested and found to comply with the limits for Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

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.

**NOTICE:** Modifications to this product will void the user's authority to operate this equipment.

### IC Information

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-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

#### EU Compliance Statement:

Horizon Hobby, LLC hereby declares that this product is in compliance with the essential requirements and other relevant provisions of the R&TTE, EMC, and LVD Directives.

A copy of the EU Declaration of Conformity is available online at:  
<http://www.horizonhobby.com/content/support-render-compliance>.

#### 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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BLH7300, BLH7360, BLH7380