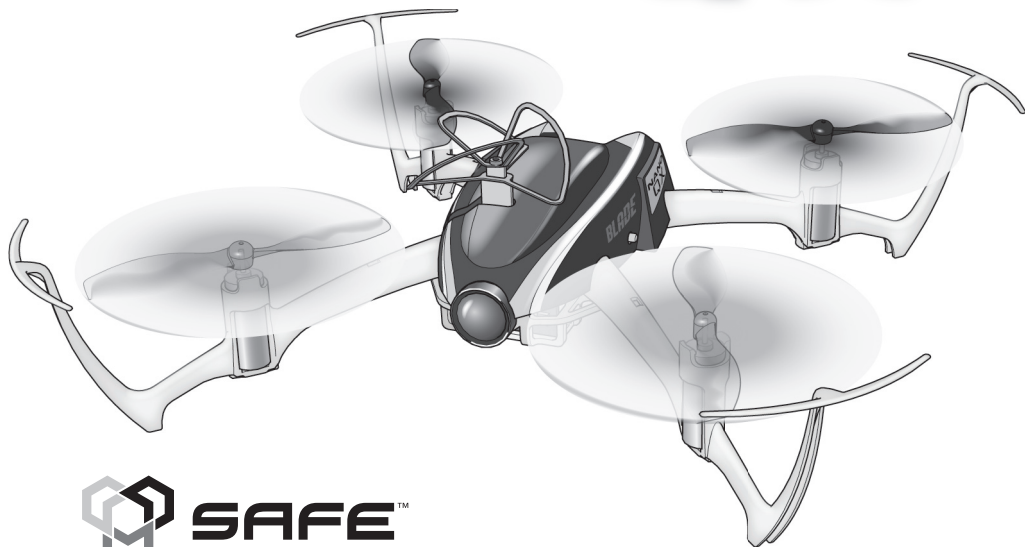


BLADE[®]

FPV NANO QX



SAFE[™]

RTF

READY-TO-FLY



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 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® FPV NANO QX

Box Contents

- Blade® FPV nano QX
- 150mAh 1S 3.7V 45C Li-Po Battery
- 1S USB Li-Po Charger, 350 mAh
- MLP4DSM
- 4 AA Batteries

FPV System:

- Fat Shark Teleporter QVGA Headset
- 720p 30fps 15Mbps Camera
- 5.8GHz Video Transmitter and Receiver
- 760mAh 2S 7.4V Li-Po Battery
- 2S Li-Po DC Charger with AC Power Supply

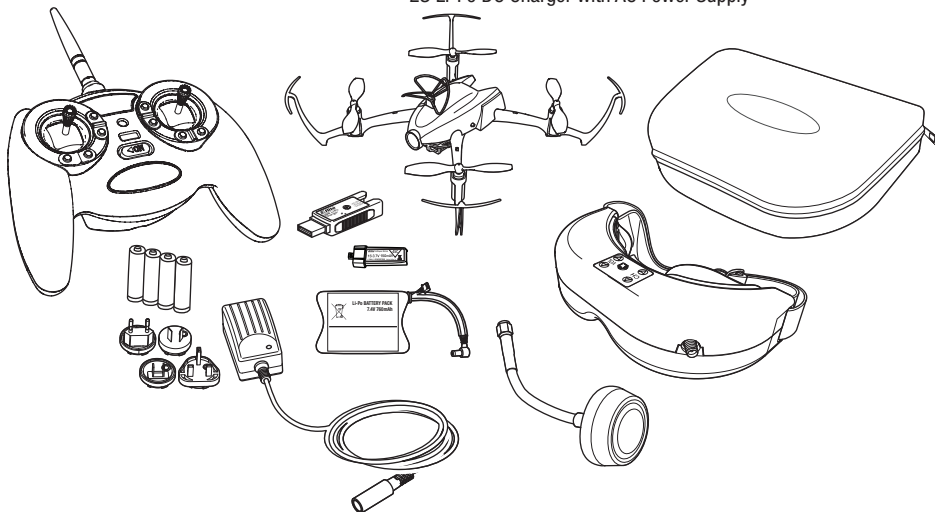


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Specifications

Length	5.51 in (140mm)	Propeller Diameter	1.97 in (50mm)
Height	1.18 in (30mm)	Flying Weight	.63 oz (18 g)

To register your product online, visit www.bladehelis.com

Components		RTF	BNF
Airframe	Blade FPV nano QX	Included	Included
Motors	6mm Brushed	Installed	Installed
On-board Electronics	4-in-1 mixer/ESCs/Gyro	Installed	Installed
Battery	150mAh 1S 3.7V 45C Li-Po	Included	Included
Charger	1S USB Li-Po Charger, 350 mAh	Included	Included
Transmitter	MLP4DSM	Included	Required
FPV System	Fat Shark Teleporter QVGA Headset	Included	Required
	720p 30fps 15Mbps Camera	Included	Included
	5.8GHz Video Transmitter and Receiver	Included	Included
	760mAh 2S 7.4V Li-Po Battery	Included	Required
	2S Li-Po DC Charger with AC Power Supply	Included	Required

First Flight Preparation

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

Charging Warnings

The battery chargers (EFLC1008 and FSV1802) included with your quadcopter have been designed to safely charge the Li-Po batteries.



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

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

Flying Checklist

- ☐ **Always turn the transmitter on first**
- ☐ Plug the flight battery into the lead from the 4-in-1 control unit
- ☐ Allow the 4-in-1 control unit to initialize and arm properly
- ☐ Fly the model
- ☐ Land the model
- ☐ Unplug the flight battery from the 4-in-1 control unit
- ☐ **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 leave charging batteries unattended.
- Never charge batteries outside recommended levels.
- Never charge damaged batteries.
- Never attempt to dismantle or alter the charger.
- Never allow minors to charge battery packs.
- Never charge batteries in extremely hot or cold places (recommended between 40–120° F (5–49° C) or place in direct sunlight.

Low Voltage Cutoff (LVC)

When a Li-Po battery is discharged below 3V, the battery may become damaged and may no longer accept a charge. The nano QX 4-in-1 control unit protects the flight battery from over-discharge using Low Voltage Cutoff (LVC). Before the battery charge decreases too much, LVC becomes active. Power to the motors decrease and the LED on the 4-in-1 control unit blinks, showing some battery power is reserved for flight control and safe landing.

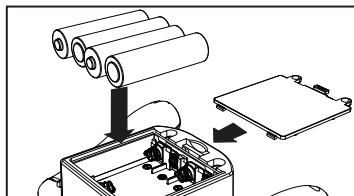
When the motor power decreases, please land the aircraft immediately and recharge the flight battery.

Disconnect and remove the Li-Po battery from the aircraft after use to prevent trickle discharge. During storage, make sure the battery charge does not fall below 3V.

NOTICE: Repeated flying to LVC will damage the battery.

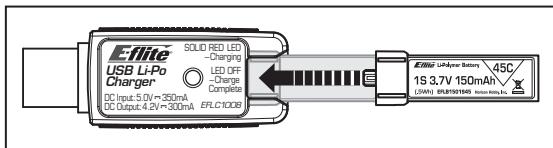
Installing the Transmitter Batteries (RTF)

Install 4 AA batteries into the transmitter, noting polarity. Replace the transmitter batteries when the power LED flashes and the transmitter beeps.



Flight Battery Charging

Your aircraft comes with a 1S 3.7V DC Li-Po battery charger and 1S 3.7V 150mAh 45C Li-Po battery. Refer to the charging warnings. It is recommended to charge the battery pack while you are inspecting the aircraft. The flight battery will be required to confirm proper aircraft operation in future steps.



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. The charger only uses power from the USB port, it will not connect to your computer. USB power supplies, such as those used to charge cellular phones, can also be used.
2. Slide the battery into the slot on the charger and press it into the charge jack/connector located at the bottom of the slot. The end cap of the battery is specifically designed to allow the battery to fit into the slot one way (usually with the label on the battery facing outward) to prevent reverse polarity connection, however, check for proper alignment and polarity.

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.

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) 150mAh battery takes approximately 30–40 minutes. The light goes out when the charge is complete.

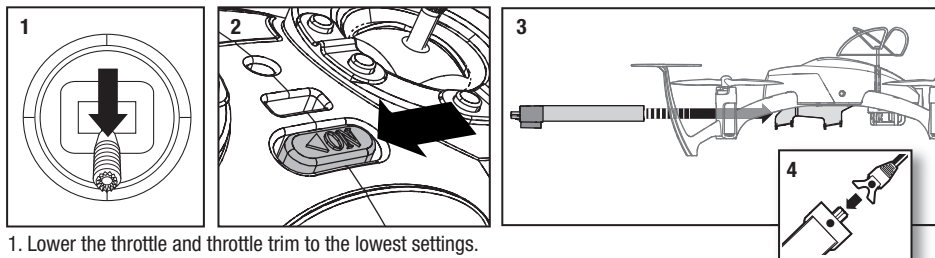
Solid Red: Charging

OFF: Max Charge



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

Installing the Flight Battery



1. Lower the throttle and throttle trim to the lowest settings.
2. Power on the transmitter.
3. Install the battery by sliding it into the battery mounting slot below the 4-in-1 control unit. Slide the battery into the slots with the label facing downward so that the battery key, molded into the battery end-cap, comes in contact with the key on the battery slot.
4. Connect the battery cable to the 4-in-1 control unit, matching the red mark on the battery to the red mark on the connector.
5. Place the nano QX on its skids on a flat surface and leave the aircraft still until the LED on the 4-in-1 control unit is solid blue (not blinking).



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.

MLP4DSM Binding Procedure

1. Disconnect the flight battery from the quadcopter.
2. Center all trims on your transmitter.
3. Power off the transmitter and move the throttle stick to the down/off position.
4. Connect the flight battery in the quadcopter. The LED on the 4-in-1 control unit flashes red during initialization, then flashes blue when it is ready to bind.
5. When the blue light is flashing, push in and hold down the left stick while powering on the transmitter (you will hear a 'click').
6. Release the left stick. The transmitter will beep and the power LED will blink.
7. The quadcopter is bound when the LED on the 4-in-1 control unit is solid blue (not blinking).
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.



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

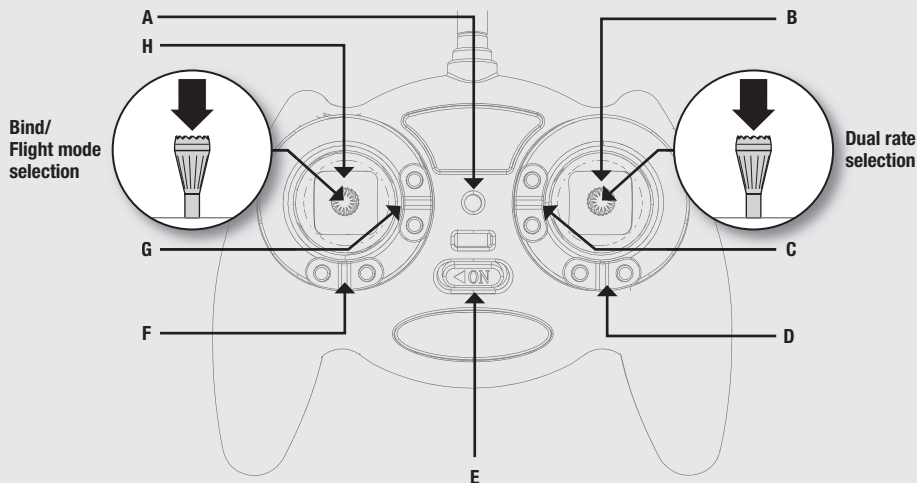
General Binding Procedure

1. Disconnect the flight battery from the quadcopter.
2. Refer to the Transmitter Setup Table to correctly setup your transmitter.
3. Center all trims on your transmitter.
4. Power off the transmitter and move all switches to the 0 position. Move the throttle to the low/off position.
5. Connect the flight battery in the quadcopter. The blue LED on the 4-in-1 control unit flashes after 5 seconds.
6. Put the transmitter into bind mode while powering on the transmitter.
7. Release the bind button/switch after 2–3 seconds. The quadcopter is bound when the blue LED on the 4-in-1 control unit turns solid.
8. Disconnect the flight battery and power the transmitter off.



CAUTION: When using a Futaba® transmitter with a *Spektrum™ DSM2®/DSMX®* module, you must reverse the throttle channel and rebind. Refer to your *Spektrum* module manual for binding and failsafe instructions. Refer to your Futaba transmitter manual for instructions on reversing the throttle channel.

Transmitter Control



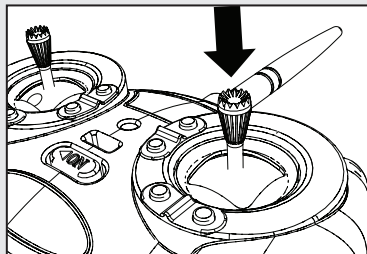
When pressed down, trim buttons make a sound that increases or decreases in pitch at each pressing. The middle or neutral trim position is heard as a middle tone in the pitch range of the sounds. The end of the control range is sounded by a series of beeps.

H	A	B	C	D	E	F	G	H
Mode 1	Power LED/ flight mode indicator	Aileron (Left/Right) Throttle (Up/Down)	Throttle Trim	Aileron Trim	ON/OFF Switch	Rudder Trim	Eleva- tor Trim	Rudder (Left/Right) Elevator (Up/Down)
Mode 2	Power LED/ flight mode indicator	Aileron (Left/Right) Elevator (Up/ Down)	Eleva- tor Trim	Aileron Trim	ON/OFF Switch	Rudder Trim	Throttle Trim	Rudder (Left/Right) Throttle (Up/Down)

Flight Mode and Rate Selection – RTF

The nano QX RTF model comes with the Blade® MLP4DSM transmitter. This transmitter's flight mode selection feature lets the pilot change between stability mode and agility mode.

- When powered on, this transmitter is automatically in stability mode and high rate.
- Change flight modes by pressing and releasing the left control stick while the transmitter is powered on. Change rates by pressing and releasing the right control stick.
- In low-rate mode, the controls cannot reach their maximum values. This mode is typically preferred by pilots looking for smoother/easier control response during first time use.
- In high-rate mode, the controls can reach their maximum values. This mode is typically preferred by experienced pilots who are ready for fast forward flight and aerobatic maneuvers (loops, rolls, etc.).
- Stability mode is shown by the flight control board on the quadcopter glowing solid blue. When flown in stability mode, the nano QX will limit the bank angle with full control input and return the aircraft to a neutral flight position when you release the elevator/aileron stick. This mode is typically preferred by pilots during first time use.
- Agility mode is shown by the flight control board on the quadcopter glowing solid red. When flown in agility mode, the model will not return to a neutral flight position when you release the controls. This mode is typically preferred by experienced pilots who are ready for fast forward flight and aerobatic maneuvers (loops, rolls, etc.).



Flight Mode Selection – BNF

If you purchased a BNF nano QX, the channel 6 switch on your transmitter will select flight modes. When the flight control board on the quadcopter is solid blue, the flight mode is set to self-stabilizing mode. When the light is solid red, the quadcopter is in agility mode. See the table on the following page for specific setup information.



Transmitter Setup Table

Using 30% exponential on aileron and elevator is recommended.

Transmitter	"Model Type"	Stability to Agility Switch	Stability to Agility TX Setup	Dual Rate Switch	Aux1 Reverse	High Rate	Low Rate
MLP4DSM	N/A	Depress Left Stick	N/A	Depress Right Stick	N/A	N/A	N/A
DX4e	N/A	Trainer/Bind	N/A	Rate	N/A	N/A	N/A
DX5e	N/A	Trainer/Bind	N/A	Rate	N/A	N/A	N/A
DX6i	Acro	Cycle Flaps Pos first time 0-1, each time after 1-0-1	In FLAPS Menu: Set NORM FLAP to Down 20	ELEV-AIL D/R	N/A	100%	70%
DX7	Acro	Cycle Flaps Pos first time 0-2, each time after 2-0-2	N/A	ELEV-AIL D/R	N/A	100%	70%
DX7S/8	Acro	Trainer/Bind	In Switch Select Menu: Set Flap to Inh, Set Trainer to Aux1	ELEV-AIL D/R	Rev	100%	70%
DX6, DX9, DX18	Acro	Trainer/Bind	In Channel Assign Menu Go to Next: Set 6 AUX1: to I	ELEV-AIL D/R	Rev	100%	70%

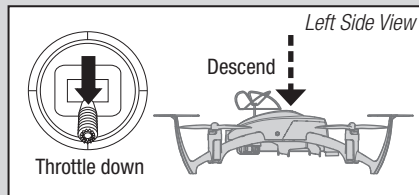
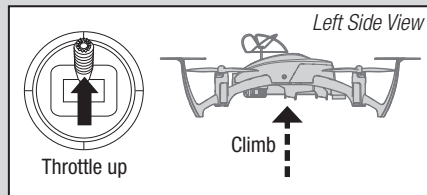
LED Codes

Equipment	LED Color	LED Status	Operation
Quadcopter	Blue	Rapid Blink	Bind Mode
		Slow Blink	No Link To Transmitter
		Solid	Stability Mode
	Red	Blink	Low Battery
		Solid	Agility Mode
RTF Transmitter	Red	Blink	Low Rate
		Solid	Hi Rate

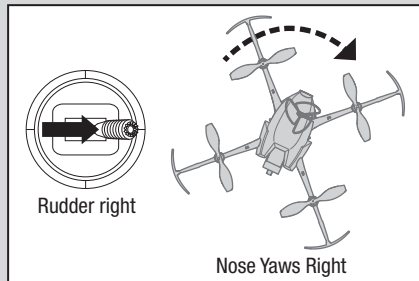
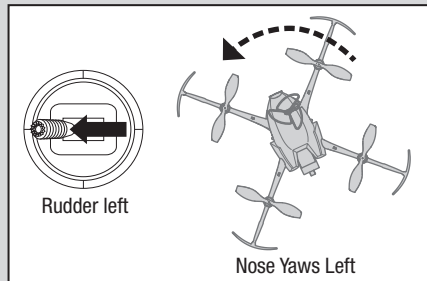
Understanding the Primary Flight Controls

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

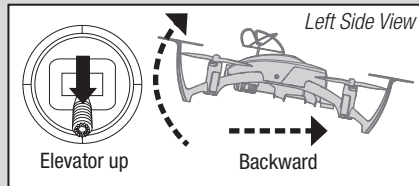
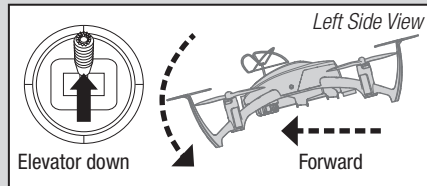
Throttle



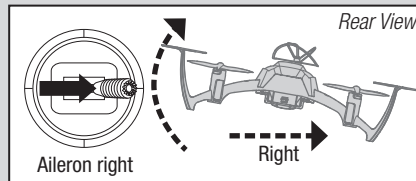
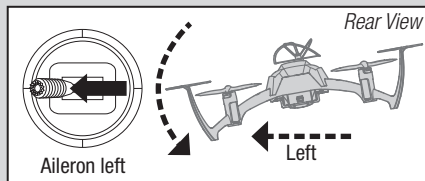
Rudder



Elevator



Aileron



4-in-1 Control Unit Function

The unique Control Unit installed in your nano QX is a lightweight combination of main motor electronic speed controls (ESCs), mixers, the SAFE™ sensor unit, and a DSM2/DSMX receiver. The 4-in-1 unit is also equipped with blue and red status indicator LEDs.

- Before each flight, ALWAYS power on the transmitter before connecting the flight battery to the 4-in-1 unit. After each flight, disconnect the flight battery from the 4-in-1 unit before powering off the transmitter.

Connecting the flight battery before powering on the transmitter can start the binding process. Please see the Transmitter and Receiver Binding section of this manual for more information.

- The 4-in-1 unit will arm the motors when the throttle stick is in the lowest possible position and the throttle trim is at the middle or a lower than middle position (the middle position is indicated by a longer than usual beep/tone). If this is the first test flight, or a test flight following repairs, also center the rudder, aileron and elevator trims.
- With the transmitter turned on and the transmitter LED glowing solid RED, connect the flight battery to the 4-in-1 unit.
- After the flight battery is connected, place the nQX on a level surface. The 4-in-1 unit status LED should glow solid BLUE within a few seconds.
- DO NOT move, sway or pretend to fly the quadcopter after connecting the flight battery. Movement can stop unit initialization and SAFE calibration. If the quadcopter is moved before the 4-in-1 unit status LED glows solid BLUE, disconnect then connect the flight battery to the 4-in-1 unit.
- When the 4-in-1 unit status LED glows solid BLUE, the control unit is initialized and ready for flight.
- As long as you set the throttle stick and trim to the correct positions during the initialization process, the ESC or motors will be armed. Use caution after arming, as the propellers will turn at throttle stick input.

Headset Battery Charging

LED Indications

Solid Red: Charging

Solid Green: Max Charge



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

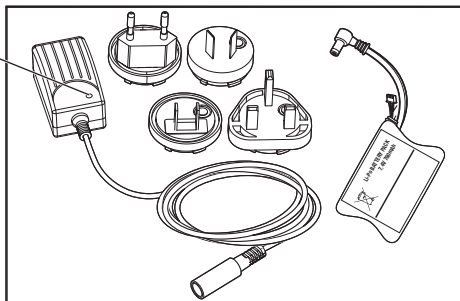


CAUTION: Always disconnect the battery from the charger immediately upon completion of charging.

Low Battery Warning

The headset will beep when the battery voltage is low.

As the headset battery voltage continues to drop, the beep rate will increase. Recharge the headset battery as soon as possible.



Setting Up the Headset

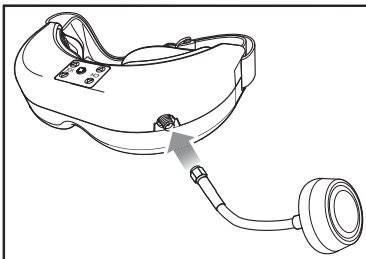


CAUTION: Do not power the headset or downlink kit without the antenna attached. Doing so will damage the transmitter and receiver amplifiers. Amplifier damage is not covered by warranty.

NOTICE: Do not leave the headset exposed to direct sunlight. Sunlight is magnified by the optics and will burn holes in the LCD color filter (appears as white open areas). This is not covered by warranty.

Keep the headset in its protective case when not in use.

1. Attach the antenna to the headset.
2. Connect the fully-charged Li-Po battery pack to the headset.
3. Look through the headset and press the Channel Up/Down buttons. Clean channels will have a consistent static background. Channels with interference will display horizontal static lines. Select one of the clean channels. A long beep sounds on channels 1 and 7.



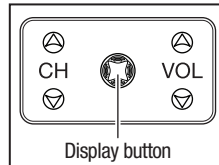
Spektrum Ultra Micro FPV Transmitter Channels

Channel 1	5470 MHz
Channel 2	5760 MHz
Channel 3	5780 MHz
Channel 4	5800 MHz
Channel 5	5820 MHz
Channel 6	5840 MHz
Channel 7	5860 MHz

4. Once you have chosen a clean channel in the headset, select the same channel on the video receiver.

Display Adjustment

- Press Left or Right on the Display Button to adjust the video contrast in the headset.
- Press Forward or Back on the Display Button to adjust the video brightness in the headset.
- Press Down on the Display Button to change the video zoom in the headset. The normal display (16:9) shows the entire image with black bars on the top & bottom. The zoom display (4:3) maximizes the image in the headset and is used with digital head tracking.



Digital Head Tracking

- **Long Press:** Depressing the Display Button toggles head tracker mode (active/deactivate). With digital head tracking active, the image will zoom in and the image will digitally pan and tilt in response to head motion.
- **Short Press:** Resets center reference position (both analog/digital).

Refer to the SPMVR1100 or SPMVS1100 headset manual for more information about head tracker functions.

Using the Ultra Micro FPV System

Consult local laws and ordinances before operating FPV equipment. In some areas, FPV operation may be limited or prohibited. You are responsible for operating this product in a legal and responsible manner.

1. Power on your radio transmitter, then power on the aircraft.
2. Power on the headset to make sure the channel is clear and then the video transmitter.
3. Perform a range test before flying.

Tip: If you are prone to motion sickness, sit in a chair. If you start to suffer from motion sickness while flying, lower your chin against your chest.

Fly in open areas, away from people, trees, cars, and buildings. The range of the system can be impacted by any obstructions blocking your signal. It is normal to see break up in the video going behind trees and other obstacles.

NOTICE: We do not recommend using the ultra micro FPV system in low light.

Flying the nano QX

- After confirming the rotor blades rotate in the correct direction, test the motor response controls.
- Adjust the throttle to a low level of power where the quadcopter begins to get “light” on its landing skids.
- Move the rudder stick a small amount to the right. The nose of the quadcopter should start to rotate to the right (clockwise).
- Move the rudder stick a small amount to the left. The nose of the quadcopter should start to rotate to the left (counter-clockwise). If the nose moves to the right, please refer to the Troubleshooting Guide.
- Move the elevator control stick forward. The two REAR landing skids should lift from the floor.
- Move the elevator control stick backward. The two FRONT landing skids should lift from the floor.
- Move the aileron stick right. The two LEFT landing skids should lift from the floor.
- Move the aileron stick left. The two RIGHT landing skids should lift from the floor.
- When rotors turn correctly and respond correctly to controls, your nano QX is ready for its first flight!

First Flight

- Increase the throttle until the model is approximately 2 ft. (600mm) off the ground in a low-level hover and concentrate on balancing the throttle stick’s position so that the nano QX holds a steady hover altitude. In some cases, you may need to make a few short “hops” to an altitude of just a few inches until you become familiar with the control inputs and trim settings required to maintain a steady hover and altitude.

The nano QX requires minor throttle adjustments to maintain its altitude in hover. Remember to keep these throttle adjustments as minimal as possible. Large adjustments could result in a loss of control and/or a possible crash.

- While attempting to establish a low-level hover, check to see if any trim adjustments are required to help keep the nano QX from constantly drifting in various directions. If you find that it constantly drifts without any directional control input, land the model before making any adjustments to the trim settings. Additional details regarding the location and function of the trim buttons are in the “Understanding the Primary Flight Controls” section of this manual.
 - If the nose of the nano QX rotates to the left or right, adjust the rudder trim.
 - If the nano QX continually drifts forward or backward, adjust the elevator trim.
 - If the nano QX continually drifts to the left or right, adjust the aileron trim.

Continue making minor trim adjustments until the machine hovers at a low altitude with very little drifting and directional control input. If the nano QX is your first multicopter or helicopter, seek the help of an experienced pilot to trim the model for you before making your first flight.

- With your nano QX properly trimmed and 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 comfortable with low-level hovering, you can transition to hovering and flying the nano QX at higher altitudes of three to four feet. At these higher altitudes, you will become comfortable with the flight characteristics of the aircraft.
- Don't be afraid to set the nano QX down on the ground quickly by lowering the throttle when approaching walls or other obstacles to help prevent propeller strikes.

Once you have gained experience and confidence in hovering the nano QX, you can attempt more advanced maneuvers including:

- | | | |
|---------------------|---------------------|----------------------|
| • Forward Flight | • Pirouettes | • Circuits (Circles) |
| • Backward Flight | • Spot Landings | • Figure 8s |
| • Skidding Takeoffs | • Skidding Landings | • Flips and Rolls |

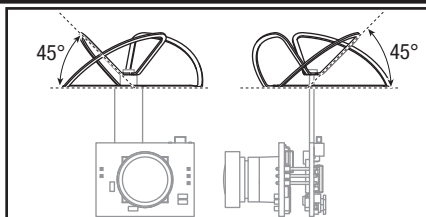
TIP: These are all possible with the RTF transmitter. When using a computer transmitter, however, increase the travel beyond 100% on aileron, elevator or rudder for maximum control authority.

Post-Flight Inspection and Maintenance Checklist

✓		
	Cleaning	Make sure the battery is not connected before cleaning. Remove dust and debris with a soft brush or a dry, lint-free cloth.
	Motors	Replace the motor when the model will not fly steady or veers off when doing a climb out.
	Wiring	Make sure the wiring does not block moving parts. Replace damaged wiring and loose connectors.
	Fasteners	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 screw only 1/8th of a turn more.
	Propellers	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.

Caring for the Video Transmitter Antenna

If your video transmitter antenna gets bent or flattened as a consequence of a hard landing, bend the antenna so the lobes are at a 45° angle to the bottom plane of the antenna, as shown at the right.



FPV Troubleshooting

Problem	Possible Cause	Solution
No image, display is completely dark	No power supplied to the video transmitter or headset	Check the power connections.
		Make sure the battery is fully charged
No image, display is glowing dark gray	Video source switch is set to external receiver mode	Ensure the video source switch is switched to headset mode
Static on all channels	Video transmitter power is off	Make sure the video transmitter LED is on
Horizontal lines in the headset display	Digital interference on the selected channel	Choose a cleaner channel
Head tracking is not moving in correct direction	Digital head tracking is reversed	Refer to the SPMVR1100 or SPMVS1100 headset manual for more information on how to reset digital head tracking



SAFE™ Technology

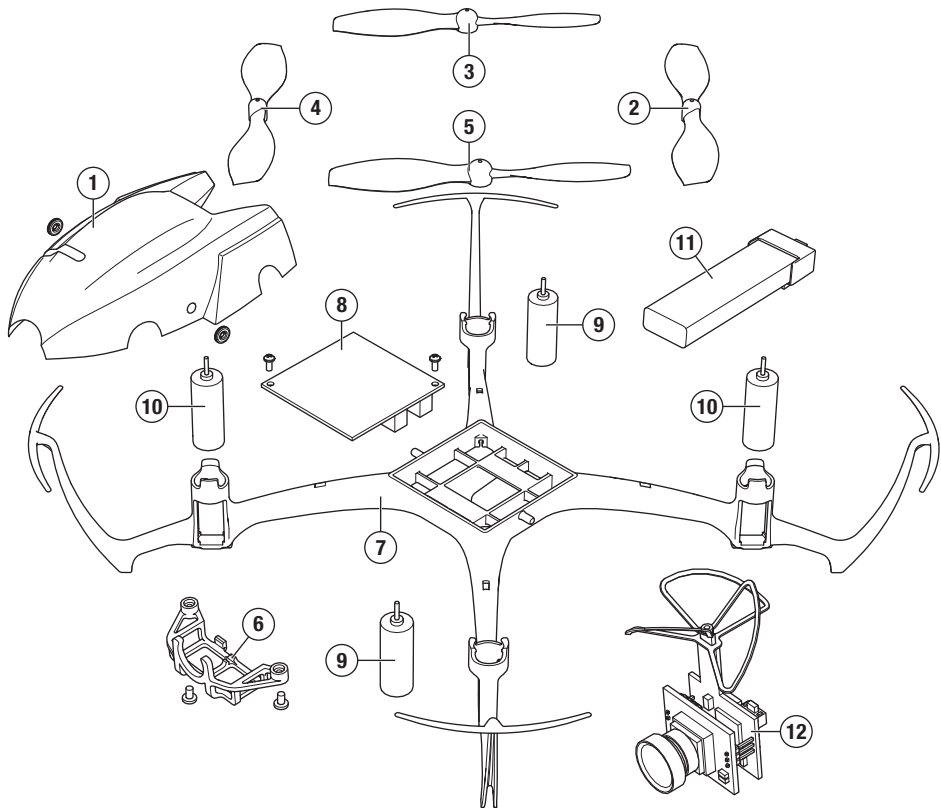
Revolutionary SAFE™ (Sensor Assisted Flight Envelope) technology uses an innovative combination of multi-axis sensors and software that allows model aircraft to know its position relative to the horizon. This spatial awareness is utilized to create a controlled flight envelope the aircraft uses to maintain 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*

Exploded View



Parts Listings

Part #	Description
	BLH7200 FPV nano QX RTF
	BLH7280 FPV nano QX BNF W/O Goggles
1	BLH7201 Blue Canopy: FPV nano QX
2	BLH7202 Prop CCW Blue (2): Nano QX
3	BLH7203 Prop CW Blue (2): Nano QX
4	BLH7204 Prop CCW Clear (2): Nano QX
5	BLH7205 Prop CW Clear (2): Nano QX
6	BLH2706 UM camera mount: Nano QX
7	BLH7639C Main Frame Clear: Nano QX
8	BLH2707 4-in-1 Rx/ESCs/Gyro: FPV nano QX
9	BLH7603 Motor, CW Rotation: nQ X
10	BLH7604 Motor, CCW Rotation: nQ X

Part #	Description
	EFLC1008 1S USB Li-Po Charger, 350mA: nQ X
11	EFLB1501S45 150mAh 1-Cell 3.7V 45c LiPo
12	SPMVA1100 Ultra Micro FPV Camera and Video Transmitter
	EFLH1064/B MLP4DSM 4CH Transmitter, 2.4GHz Mode 2
	EFLH10641 MLP4DSM 4CH Transmitter, 2.4GHz Mode 1
	SPMVR1100 Teleporter V4 Video Headset with Head Tracking
	FSV1701 1000mAh 2S 7.4V Video Headset Li-Po Battery

Optional Parts

Part #	Description
EFLC1006	Celectra 1S 3.7v Variable Rate DC Li-Po Charger
BLH7620	Prop, CW Rotation, Blk (2): nQ X
BLH7621	Prop, CCW Rotation, Blk (2): nQ X
BLH7620G	Prop, CW Rotation, Grn (2): nQ X
BLH7621G	Prop, CCW Rotation, Grn (2): nQ X
BLH7620Y	Prop, CW Rotation, Yel (2): nQ X
BLH7621Y	Prop, CCW Rotation, Yel (2): nQ X
	DX5e DSMX 5-Channel Transmitter Only
	DX6i DSMX 6-Channel Transmitter Only

Part #	Description
	DX6 DSMX 6-Channel Transmitter Only
	DX7s DSMX 7-Channel Transmitter Only
	DX8 DSMX 8-Channel Transmitter Only
	DX9 DSMX 9-Channel Transmitter Only
	DX9 Black Edition DSMX 9-Channel Transmitter Only
	DX18 Gen2 DSMX 18-Channel Transmitter Only

Troubleshooting Guide

Problem	Possible Cause	Solution
Nano QX control response is inconsistent or requires extra trim to neutralize movement	Aircraft not initialized on a level surface	Disconnect the flight battery, center the control trim and re-initialize the quadcopter
	Battery not correctly placed in battery slot	Adjust battery position so quadcopter balances in the center of the frame
Nano QX 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
	nano QX moved during initialization	Disconnect the flight battery and re-initialize the nano QX while keeping the quadcopter from moving
	Throttle channel is reversed	Disconnect flight battery, reverse the throttle channel on the transmitter, reconnect flight battery
Nano QX does not function and smells burnt after connecting the flight battery	Flight battery connected with the wrong polarity	Replace the 4-in-1 board. Connect the flight battery noting proper polarity
Nano QX 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 USB power source for the charger
	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

Problem	Possible Cause	Solution
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
	Bind switch or button was not held while transmitter was powered on	Power off transmitter and repeat bind process
	Aircraft or transmitter is too close to large metal object, wireless source or another transmitter	Move aircraft and transmitter to another location and attempt binding again
LED on the receiver flashes rapidly and the nano QX will not respond to the transmitter (after binding)	Less than a 5-second wait between first powering on the transmitter and connecting the flight battery to the nano QX	Leave the transmitter powered on. Disconnect and reconnect the flight battery to the nano QX
	The nano QX 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 nano QX
	Flight battery or transmitter battery charge is too low	Replace or recharge batteries
	Aircraft or transmitter is too close to large metal object, wireless source or another transmitter	Move aircraft and transmitter to another location and attempt connecting again
Crashes immediately upon lift-off	Propellers in wrong locations or incorrect flight mode selected	Make necessary adjustments

Limited Warranty

What this Warranty Covers

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

What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations. OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

Purchaser's Remedy

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS

BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

Law

These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

WARRANTY SERVICES

Questions, Assistance, and Services

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at www.horizonhobby.com, submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative.

Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or

damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at http://www.horizonhobby.com/content/_service-center_render-service-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

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

Warranty Requirements

For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date.

Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

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.

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.

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)	www.quickbase.com/db/bghj7ey8c?a=GenNewRecord 888-959-2304	
	Sales	sales@horizonhobby.com 888-959-2304	

Country of Purchase	Horizon Hobby	Contact Information	Address
United Kingdom	Service/Parts/Sales: Horizon Hobby Limited	sales@horizonhobby.co.uk +44 (0) 1279 641 097	Units 1–4 , Ployters Rd, Staple Tye Harlow, Essex, CM18 7NS, United Kingdom
Germany	Horizon Technischer Service Sales: Horizon Hobby GmbH	service@horizonhobby.de +49 (0) 4121 2655 100	Christian-Junge-Straße 1 25337 Elmshorn, Germany
France	Service/Parts/Sales: Horizon Hobby SAS	infofrance@horizonhobby.com +33 (0) 1 60 18 34 90	11 Rue Georges Charpak 77127 Lieusaint, France
China	Service/Parts/Sales: Horizon Hobby – China	info@horizonhobby.com.cn +86 (021) 5180 9868	Room 506, No. 97 Changshou Rd. Shanghai, China 200060

FCC Information

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



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

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

FPV System:

FCC ID: 2ABYQFSV1251.

Nano QX:

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

IC Information

IC ID: 12280A-125X. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Compliance Information for the European Union

Declaration of Conformity

(in accordance with ISO/IEC 17050-1)

No. HH2014100202

Product(s): Nano QX FPV RTF
Item Number(s): BLH7200, BLH7200M1
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, EMC Directive 2004/108/EC, and LVD Directive 2006/95/EC:

Nano QX

EN 300-328 V1.7.1: 2006
EN 301 489-1 V1.7.1: 2006
EN 301 489-17 V1.3.2: 2008
EN60950-1:2006+A11:2009+A1:2010+A12: 2011
EN61000-3-2:2006+A1:2009+A2:2009
EN61000-3-3:2008
EN55022:2010 + AC:2011
EN55024:2010

FPV System

EN 300 440-1 V1.6.1
EN 300 440-2 V1.4.1
EN 301 489-1 V1.9.2: (2011-09)
EN 301 489-3 V1.6.1 (2013-08)
EN55022:2010 + AC:2011
EN55024:2010
EN 62479:2010
EN 60950-1:2006+A11:2009+A1:2010+A12: 2011



Signed for and
on behalf of:
Horizon Hobby, LLC
Champaign, IL USA
October 2, 2014

Mike Dunne
Executive Vice President
Product Divisions
Horizon Hobby, LLC

Declaration of Conformity

(in accordance with ISO/IEC 17050-1)

No. HH2014100203

Product(s): Nano QX FPV BNF without Goggles
Item Number(s): BLH7280
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, EMC Directive 2004/108/EC, and LVD Directive 2006/95/EC:

Nano QX

EN 301 489-1 V1.7.1: 2006
EN 301 489-17 V1.3.2: 2008
EN60950-1:2006+A11:2009+A1:2010+A12: 2011
EN61000-3-2:2006+A1:2009+A2:2009
EN61000-3-3:2008
EN55022:2010 + AC:2011
EN55024:2010

FPV Camera

EN 300 440-1 V1.6.1
EN 300 440-2 V1.4.1
EN 301 489-1 V1.9.2: (2011-09)
EN 301 489-3 V1.6.1 (2013-08)
EN 62479:2010
EN 60950-1:2006+A11:2009+A1:2010+A12: 2011



Signed for and
on behalf of:
Horizon Hobby, LLC
Champaign, IL USA
October 2, 2014

Mike Dunne
Executive Vice President
Product Divisions
Horizon Hobby, LLC

Instructions for disposal of WEEE by users in the European Union



This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collections point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

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