SPEKTRUM.

FC6250HX HELICOPTER FLYBARLESS SYSTEM

FC6250HX HUBSCHRAUBER MIT FLYBARLESS-SYSTEM

SYSTÈME SANS BARRE STABILISATRICE POUR HÉLICOPTÈRE FC6250HX

SISTEMA PER ELICOTTERO FLYBARLESS FC6250HX

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 or towerhobbies.com and click on the support or resources 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:

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.

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

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

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

This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not attempt disassembly, use with incompatible components or augment product in any way without the approval of Horizon Hobby, 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.

WARNING AGAINST COUNTERFEIT PRODUCTS: Always purchase from a Horizon Hobby, LLC authorized dealer to ensure authentic high-quality Spektrum product. Horizon Hobby, LLC disclaims all support and warranty with regards, but not limited to, compatibility and performance of counterfeit products or products claiming compatibility with DSM or Spektrum technology.

NOTICE: This product is only intended for use with unmanned, hobby-grade, remote-controlled vehicles and aircraft. Horizon Hobby disclaims all liability outside of the intended purpose and will not provide warranty service related thereto.

SPMFC6250HX			
Туре	FC6250HX Helicopter Flybarless System		
Dimensions (L \times W \times H)	42.5 x 24 x 13.6mm (1.67 x 0.94 x 0.54in)		
Weight	13g (0.46oz)		
Voltage Range	4.8V - 8.4V		

Spektrum FC6250HX

The Spektrum FC6250HX Flight Controller is a powerful model aircraft stabilization system that features the latest AS3X[®] and SAFE Stabilization technology. It features a leading edge 6-axis M.E.M.S. inertial gyro, powerful and fast 32 bit ARM M4 Cortex processor and proprietary Advanced Adaptive Flight Control Algorithms.

SAFE technology allows pilots to operate within flight modes that automatically keep the model in a manageable attitude, constantly leveling the model when the control sticks are returned to center. Additionally, pilots can use SAFE technology to use a Panic Recovery option. All these features are set up and tuned straight from a compatible Spektrum transmitter with the Forward Programming menu.

Forward Programming allows you to setup, program, and tune the FC6250HX flight controller without extra hardware, devices, or computers. Pilots can make tuning changes on the flight line to the swashplate, tail rotor, SAFE stability, flight modes and more, from a compatible Spektrum transmitter.

Visit the Spektrum[™] USB Programmer and PC programmer application via SpektrumRC.com for updates and changes to the FC6250HX.



Features

- Includes one SRXL2[™] SPM4651T Full Range Telemetry DSMX[®] Receiver with bind button
- · Supports up to two SRXL2 receivers at 11ms or 22ms
- · User configurable SAFE Panic Recovery and Stability Flight Modes
- Easy to use Forward Programming for setup and gain adjustments from compatible Spektrum Transmitters
- SMART Technology ready for Smart ESC and Battery telemetry
- Supports IX and DX series transmitters
- Supports Digital and Analog servos
- 70Hz to 560Hz Adjustable Servo Frequency (760µs and 1520µs center)

FN

LED Indications

Red, green, blue rapid blinking	Initialization complete
Slow green strobe	Normal operation
Slow red strobe	Failsafe
Rapid red flash when exiting forward programming	Throttle not low; not in Normal/Hold
Slow blue strobe	Forward programming mode

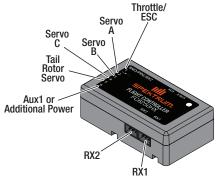
Installation

- Mount the FC6250HX flight controller with the servo connector block facing either forward or aft. The side of the FC2650HX facing the main rotor disc must be parallel to the rotor disc.
- Use the included mounting tape (SPMA3032) to mount the FC6250HX flight controller to the airframe.

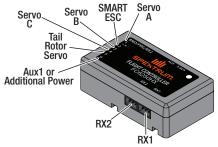


Connections (Servo and ESC)

Normal Configuration



SMART ESC Configuration



Remote Receivers

The FC6250HX flight controller uses a SRXL2[™] Telemetry Remote to access **Forward Programming** as well as other SMART features. For models larger than 360mm, connect a second SRXL2 remote to the RX1 port.

- SRXL2 remotes can be connected to DATA/BIND/RX2, RX2 or RX1 ports.
- Two SRXL2 telemetry remotes can be used (see diagram above).
- Always ensure the remotes are connected to the transmitter before flying the model. A solid orange LED on each remote receiver indicates a successful connection.

Forward Programming

The FC6250HX flight controller is exclusively setup, programmed, and tuned via the **Forward Programming** menu on a compatible aircraft Spektrum radio system (e.g., Spektrum Gen2 DX and the iX series).

Visit **spektrumrc.com** for an updated list of Forward Programming capable transmitters and updated transmitter firmware.

- Before *entering* forward programming, lower the throttle to the full stop position.
- Before exiting forward programming, lower the throttle to the full stop position.

TIP: Always exit forward programming before disconnecting the power source to ensure parameters are saved.

NOTICE: Do not connect the swash plate or tail rotor servos until the servo frequency has been configured. Failure to do so may result in damage to the servo and/or your model.

WARNING: Always remove the pinion gear or disconnect the main drive motor from the ESC to disengage the drive system during initial setup. The main rotor blades may turn in response to setup changes or transmitter inputs. Failure to do so could result in serious personal injury or property damage.

Binding

- 1. Power ON the FC6250HX flight controller and press the bind button on each remote. The remote will begin flashing, indicating it is ready to bind.
- Press the bind button on your transmitter. Lower the throttle stick to the stop position and power ON the transmitter.

Once the bind process is complete, the remote receiver LED turns solid orange, indicating the FC6250HX is ready for setup.

The FC6250HX LED will begin flashing green, indicating a successful bind. A red flashing LED indicates binding is not successful. Begin the binding procedure again.

Setup

1. In your transmitter, create a new heli setup as a **Normal** swash plate type. Set the Frame Rate to 11ms.

The FC6250HX requires the default new model transmitter configuration.

All channels, other than throttle, must have **Reversing** set to **Normal**. All channels, other than throttle, must have the **Subtrim** set to **0**. All channels, other than throttle, must have the **Travel** set to **100/100**.

All throttle channel settings occur in the following setup procedures within the transmitter. If you are using a throttle servo do not connect the servo until you reach the throttle setup step below.

Configure your desired flight modes, throttle curves and pitch curves per the respective manufacturer recommendations for the helicopter, ESC Engine and Transmitter. Please take note that the collective pitch range will be setup within the FC6250HX setup instructions below.

Within your transmitter enable the Transmitter Gyro function and select the "Flight Mode Switch" option. Set each flight mode gain to 75%.

- In the transmitter menu, select Forward Programming. The transmitter connects to the flight controller, and a menu list displays.
- 3. Navigate to the **Setup→Swashplate→Output Setup** menu again.
- Set the Frame Rate to the operating frequency specified by your servo manufacturer.
- Select the **Type** menu. Set the swashplate type to match your helicopter's configuration. Connect the servos shown on the transmitter and per the Flight Controller connection diagram. Select **Back**, and navigate to the **Direction** menu.
- Set the servo reversing to ensure the collective pitch stick moves the servos in the direction of positive collective.
 Select **Back** to return to the previous menu.

Select the Sub Trim menu. The swashplate servos move to the center position. Use the sub trim adjustments to ensure the servos are level.

Before exiting the menu, ensure the main rotor blades are at 0 degrees collective and the swashplate is level in the roll and pitch axis.

Select Back twice to exit the Swashplate→Output Setup menu.

 Select the AFR menu. Verify that the roll and pitch cyclic are moving in the correct direction by moving the cyclic stick.

To reverse an axis, edit the axis value and invert the sign. Once the directions are correct, center the collective stick (0 degrees).

- 9. Place a pitch gauge on a main rotor blade and zero it out.
 - Align the blade with the roll axis, apply full right cyclic, and adjust the AFR to 12.5 degrees.
 - Align the blade with the pitch axis and zero the pitch gauge. Apply full aft cyclic, and adjust the AFR to 12.5 degrees.
- Adjust the **Collective AFR** to set your desired collective pitch range. Remove the pitch gauge. Select **Back** twice to return to the **Setup** menu. The swashplate setup is complete.
- 11. Navigate to the **Tailrotor→Output Setup** menu.
- 12. Set the **Frame Rate** to the operating frequency specified by your tail rotor servo manufacturer.
- 13. Connect the tail rotor servo to Slot 5 and navigate to the **Direction** menu. Move the tail rotor stick on the transmitter to the right and ensure the tail rotor servo is moving the correct direction. If not, reverse the channel direction. Select **Back** to return to the previous menu.
- 14. Select **Subtrim** to center the tail rotor servo. Select **Back** to return to the previous menu.
- 15. Select the Travel menu.
 - Select Left travel. Hold the transmitter tail rotor stick full left, and adjust travel to ensure full travel.
 - Select the **Right** travel. Hold the transmitter tail rotor stick full right, and adjust travel to ensure full travel and that no binding occurs.

 $\ensuremath{\text{TIP:}}\xspace$ 90% to 120% is recommended to achieve optimal flight performance.

Press **Back** twice to return to the **Setup** menu. Tailrotor setup is complete.

WARNING: Always remove the pinion gear or disconnect the main drive motor from the ESC to disengage the drive system during initial setup. The main rotor blades may turn in response to setup changes or transmitter inputs. Failure to do so could result in serious personal injury or property damage.

- EN
 - Exit Forward Programming. Configure the throttle settings according to the instructions provided by your ESC/Internal Combustion Engine and Transmitter manufacturer.
 - Once throttle setup is complete, enter Forward Programming mode, and select the Setup→Throttle→Failsafe menu.
 - Lower the throttle stick to the full stop position, and select Capture to record the throttle fail safe position.
 Select Back to return to the Setup→Throttle menu.
 - 19. Select Throttle→Hover

This setting is the throttle point where your model hovers in normal mode, mainly during takeoff and landing. The flight controller applies special anti roll over algorithms at or below the throttle setting, helping to make takeoffs and landings easier. The Stunt 1 and Stunt 2 throttle curves should be above the hover throttle setting to ensure the roll over mitigation is disabled in flight.

During the initial setup, you can set **Throttle → Hover** to a high value and test the model. Once the throttle setting is determined for hovering in normal mode, set the **Hover Throttle** value.

Select Back to return to the Setup menu.

- 20. Select the Gyro Settings→Orientation Menu, and set the mounting orientation to match the FC6250HX mounting orientation on your helicopter. Once complete, physically move the helicopter on each axis to ensure the gyros are compensating in the correct direction. Select Back twice to return to the Setup menu.
- Select the FM Channel and select Inhibit. After initial test flights, if you
 would like to use individual gains per flight mode, set the FM Channel
 within the Setup menu.
- 22. The Gain Channel defaults to the gear channel. This is the transmitter aux gyro gain channel for the tail rotor. Enable the Gyro function on transmitter and set the gain to 75% for all flight modes.
- Press **Back** to exit the forward programming menu, and save the parameters.

The FC6250HX flight controller setup is complete.

Operation

Preflight Checklist

- □ Inspect the model, wiring, and electrical components.
- Activate Normal Flight Mode on the transmitter.
- Activate Throttle Hold on the transmitter. Lower the throttle to stop or idle.
- Dever ON the transmitter.
- Dever ON the model, and wait for initialization to complete.
- Complete the tailrotor and cyclic tests.
- Connect the flight pack to the ESC (electric models).
- Verify that all connected remote receivers display a solid orange LED.
- Confirm that the transmitter roll, pitch, yaw and collective inputs correspond to the helicopter controls.
- Confirm that the FC6250HX is compensating in the correct direction.
- Review all operational instructions before flying your model.
- Place the model on a level surface for take off.

Postflight Checklist

- Disconnect the flight battery (electric models)
- Power down the FC6250HX
- Always turn the transmitter off last

Telemetry Flight Log

The transmitter telemetry flightlog will provide the following information.



NOTICE: After a flight, if frame losses higher than 30 occur, evaluate the remote receiver positioning and ensure the antennas have a clear signal path to the transmission signal.

To help troubleshoot frame losses and holds, use the Range Test reduced power function within your transmitter. Review your transmitter manual for additional instructions.

SMART Technology Telemetry

Spektrum SMART Technology provides telemetry information including battery voltage and temperature.

A firmware update for your transmitter may be required.

To view SMART Telemetry:

- The SMART Logo appears under the battery logo on the home page. A signal bar appears in the top left corner of the screen.
- 2. Scroll past the servo monitor to view SMART technology screens.

For more information about compatible transmitters, firmware updates, and how to use the SMART Technology on your transmitter, visit www.SpektrumRC.com.

Gain Adjustment

The main **Forward Programming** displays flight control adjustments under **Swashplate** and **Tailrotor**.

Tip: Adjust gains per flight mode by setting the Setup→FM Channel: Function in the setup menu. Set the Channel Input Config in the transmitter for the selected channel to Flight Mode.

After the tail gains are fairly close, use the transmitter gyro gain function to adjust the gain for each flight mode.

1. Cyclic P Gain Adjustment (Default 50%)

Higher gain will result in greater stability. Setting the gain too high may result in random twitches if your model has an excessive level of vibration. High frequency oscillations may also occur if the gain is set too high.

Lower gain will result in less stability. Too low of a value may result in a less stable model, particularly outdoors in winds.

If you are located at a higher altitude or in a warmer climate, higher gains may be beneficial—the opposite is true for lower altitude or colder climates.

2. Cyclic I Gain Adjustment (Default 50%)

Higher gain will result in the model remaining still, but may cause low frequency oscillations if increased too far.

Lower gain will result in the model drifting slowly.

If you are located at a higher altitude or in a warmer climate, higher gains may be beneficial—the opposite is true for lower altitude or colder climates.

3. Cyclic D Gain Adjustment (Default 7%)

Higher gain will improve the response rate of your inputs. If the gain is raised too much, high frequency oscillations may occur. *Lower gain* will slow down the response to inputs.

4. Cyclic Response (Default 100%)

Higher cyclic response will result in a more aggressive cyclic response Lower cyclic response will result in a less aggressive cyclic response.

5. Tailrotor P Gain Adjustment (Default 85%)

Higher gain will result in greater stability. Setting the gain too high may result in random twitches if your model has an excessive level of vibration. High frequency oscillations may also occur if the gain is set too high. *Lower gain* may result in a decrease in stability. Too low of a value may result in a less stable model particularly outdoors in winds.

If you are located at a higher altitude or in a warmer climate, higher gains may be beneficial—the opposite is true for lower altitude or colder climates.

6. Tailrotor I Gain Adjustment (Default 95%)

Higher gain results in the tail remaining still. If the gain is raised too far, low speed oscillations may occur.

Lower gain will result in the tail drifting in flight over time.

If you are located at a higher altitude or in a warmer climate, higher gains may be beneficial—the opposite is true for lower altitude or colder climates.

7. Tailrotor D Gain Adjustment (Default 10%)

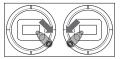
Higher gain will improve the response rate to your inputs. If raised too far, high frequency oscillations may occur.

Lower gain will slow down the response to inputs, but will not have an effect on stability.

SAFE® Technology

Always complete test flights and gain adjustments before enabling SAFE Technology features.

Before enabling the stability feature, test the operation by activating SAFE Panic Recovery function in flight with the transmitter sticks centered. The model should return to within 4 degrees of level.



NOTICE: High levels of vibration can lead to attitude estimation errors. When SAFE Panic Recovery is activated, if the model is outside of 4 degrees of level, evaluate the model for vibration and, if necessary, perform the calibration step.

The SAFE Panic Recovery function is activated by setting up the following mix within the transmitter:

Mixing				
P-Mix 1	Normal			
	Channels	Ger	> Gyr	
	Rate	125%	125%/0%	
	Offset	-10	-100%	
	Switch	Swi	Switch I	
	Position	0	1	

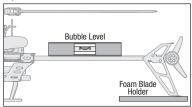
To activate the SAFE Panic Recovery function, move the collective stick to the center position and press the bind button (switch I) on your transmitter.

The SAFE Stability function can be enabled within the forward programming SAFE menu. All gains, flight mode setup, envelope and gain settings are available within the SAFE menu. To enable or disable the stability function per flight mode set the FM Channel to the appropriate channel within the Setup menu.

Calibration

The FC6250HX is calibrated at the factory. Recalibrate the unit if the panic or stability functions do not return to level or if there is a slow drift in the roll, pitch, or yaw axis:

1. Level the model using a bubble level on the roll and pitch axis, power on and initialize the system.



- 2. Go to the System Setup menu and select Calibrate.
- 3. Select Apply.

A red flashing light during calibration indicates the model is either not level or not stationary. Level the model, taking care to keep it still. A yellow flashing light during calibration indicates the calibration is proceeding normally.

4. After the calibration is successful, the LED flashes green.

Troubleshooting Guide

Problem	Possible Cause	Solution	
Helicopter will not bind to the transmitter (dur- ing binding)	Low flight battery or transmit- ter battery voltage	Fully charge or replace the flight battery and/ or transmitter batteries	
	Transmitter is not in bind mode	Power on the transmitter while holding the Trainer/Bind switch. Hold the Trainer/Bind switch until binding is complete	
	Transmitter too close to the helicopter during binding process	Power off the transmitter. Move the transmit- ter further away from the helicopter. Disconnect and reconnect the flight bat- tery to the helicopter and follow binding instructions	
Helicopter will not link to the	Helicopter is bound to a different model memory (ModelMatch™ radios only)	Disconnect the flight battery. Select the correct model memory on the transmitter. Reconnect the flight battery	
transmitter (after binding)	Flight battery/Transmitter battery charge is too low	Replace or recharge batteries	
Flight controller will not initialize	Helicopter was moved during initialization	If windy, lay helicopter on its side during initialization	
	Transmitter is powered off	Power on the transmitter	
	Controls are not centered	Center elevator, aileron and rudder controls. Make sure the throttle is at idle	

Troubleshooting Guide

Problem	Possible Cause	Solution
Helicopter will not respond to the throttle but responds to other controls	Throttle not at idle and/or throttle trim is too high	Lower the throttle stick and lower the throttle trim
	Transmitter is not in normal mode or throttle hold is on	Verify the transmitter is in normal mode and throttle hold is off
	Motor is not connected to the ESC or the motor wires are damaged	Connect the motor wires to the ESC and check motor wires for damage
	Flight battery charge is too low	Replace or recharge flight battery
	Throttle channel is reversed	Reverse the throttle channel on the transmitter
	Flight battery has low voltage	Fully charge the flight battery
	Flight battery is old or damaged	Replace the flight battery
Helicopter power is lacking	Flight battery cells are unbal- anced	Fully charge the flight battery, allowing the charger time to balance the cells
	Excessive current is being drawn through the BEC	Check all servos and the helicopter motor for damage
	Tail drive belt tension is not correct	See "Tail Belt Tension" section in this manual
	Main rotor head is not spin- ning in the correct direction	Make sure the main rotor head is spinning clockwise. Refer to the motor control test
Helicopter will	Transmitter settings are not correct	Check throttle and pitch curve settings and pitch control direction
	Flight battery has low voltage	Fully charge the flight battery
	Main rotor blades are in- stalled backwards	Install the main rotor blades with the thicker side as the leading edge
Helicopter tail spins out of control	Rudder control and/or sensor direction reversed	Make sure the rudder control and the rudder sensor are operating in the correct direction
	Tail servo is damaged	Check the rudder servo for damage and replace if necessary
	Inadequate control arm throw	Check the rudder control arm for adequate travel and adjust if necessary
	Tail belt is too loose	Make sure the tail drive belt tension is adjusted correctly
Helicopter wobbles in flight	Cyclic gain is too high	Tuning options using forward programming are available under the "Advanced Settings" section in this manual
	Headspeed is too low	Increase the helicopter's head speed via your transmitter settings and/or using a freshly charged flight pack
	Dampers are worn	Replace the main rotor head dampers

1-YEAR 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 for a period of 1 year from 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, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WAR-RANTIES 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 REQUIRE-MENTS 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 UN-DER 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 1/2 hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service. you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby.com/content/service-center render-service-center.

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

Warranty and Service Contact Information

Country of Purchase	Horizon Hobby	Contact Information	Address	
	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/ RequestForm/	0004 D	
of America	Horizon Product Support	productsupport@ horizonhobby.com	2904 Research Rd Champaign, Illinois, 61822 USA	
	(Product Technical Assistance)	877-504-0233		
	Sales	websales@horizonhobby.com 800-338-4639		
EU	Horizon Technischer Service	service@horizonhobby.eu	Hanskampring 9 D 22885 Barsbüttel,	
	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	Germany	

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.

Supplier's Declaration of Conformity

Spektrum Heli Flight Controller (SPMFC6250HX)

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to 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 into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Horizon Hobby, LLC 2904 Research Rd. Champaign, IL 61822 Email: compliance@horizonhobby.com Web: HorizonHobby.com

IC Information

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 RED directive.

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 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.



II**II** SPEKTRUM.

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