

### 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.**

### General 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.

The ST-10+ Personal Ground Station Transmitter is not compatible with any receiver equipped with Spektrum™ DSM®, DSM2® or DSMX® technology.

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## Specifications

Number of Channels: 10

RC Band: 2.4GHz

RC Modulation: QPSK

Video Downlink Band: 5.1GHz and 5.8GHz

Telemetry/OSD: Yes

Micro SD Card Compatible: Yes

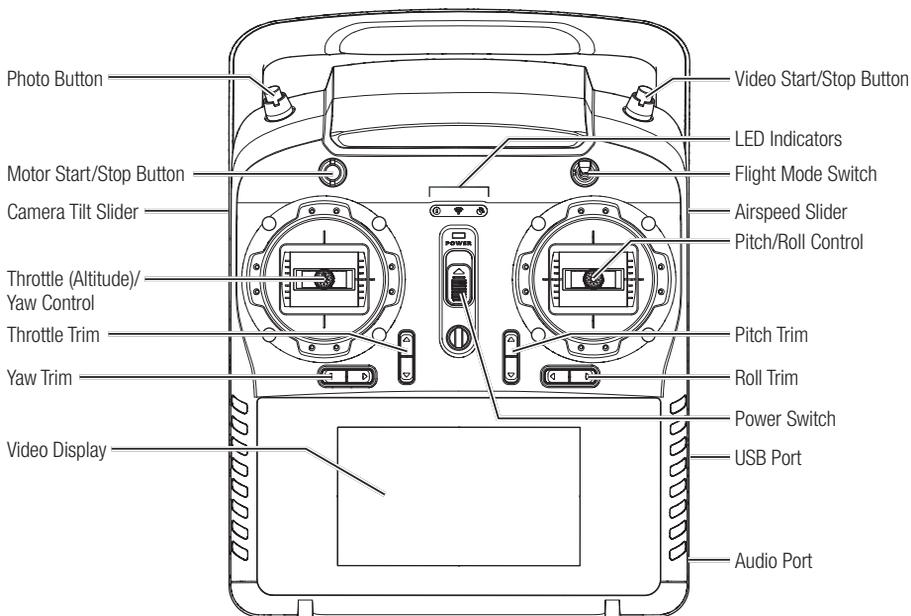
LCD Screen Size: 4.5"

Touchscreen: Yes

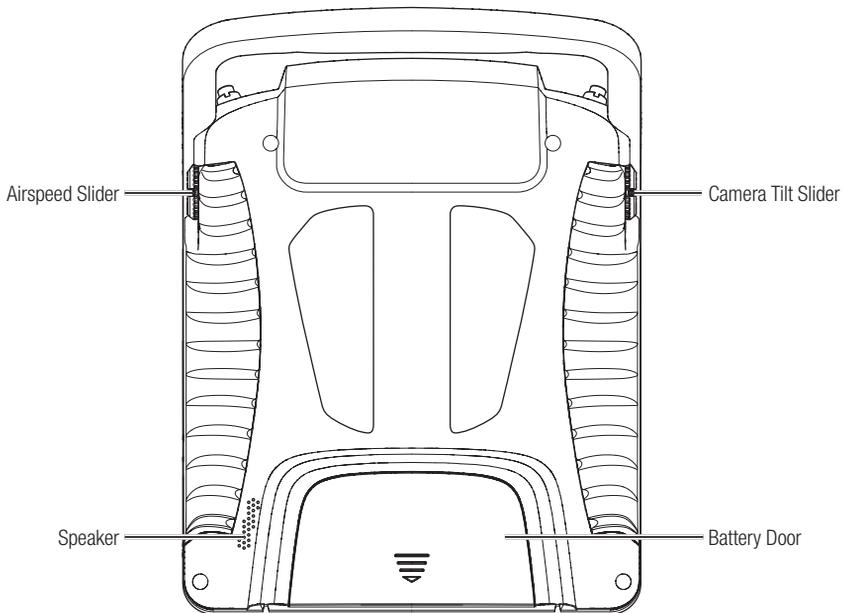
Battery: 5200mAh 1S 3.6V 1C Li-Ion Battery

## Control Layout

### Front

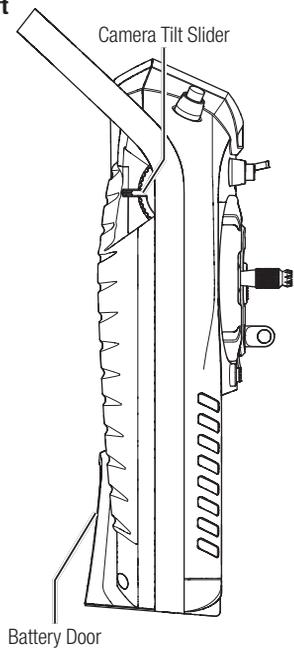


## Back

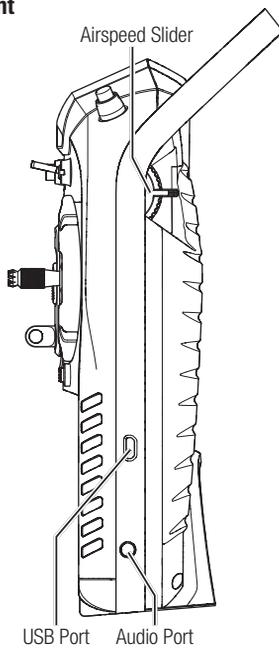


## Side

### Left



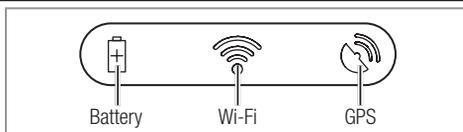
### Right



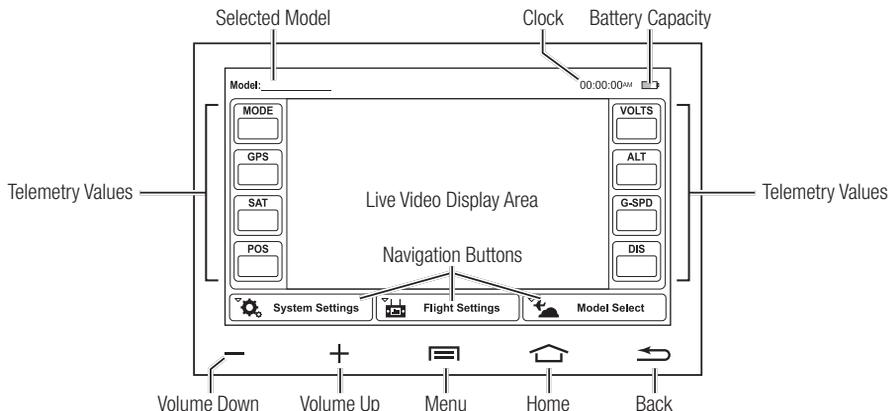
## LED Indicators

The ST-10+ LED indicator show the status of the battery, Wi-Fi connection and GPS connection.

The Wi-Fi and GPS LEDs flash while the ST-10+ establishes a connection. When the connection is made, the LEDs glow solid.



## Touchscreen Layout



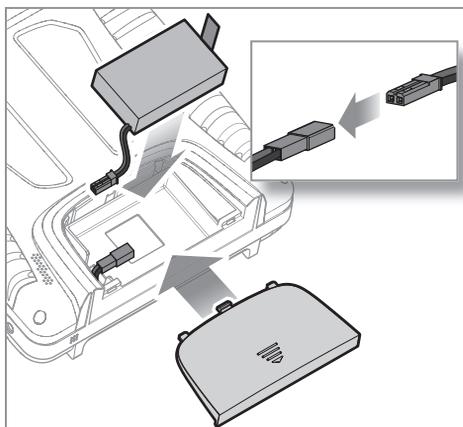
## Battery Installation

The ST-10+ is shipped from the factory with the 3.6V 5200mAh Li-Ion battery installed. If you should need to replace the battery at any time, use the following installation instructions:

1. Remove the battery cover.
2. Connect the battery lead to the ST-10+, noting polarity, as shown.
3. Install the battery, label facing up, making sure the pull tab is accessible.
4. Replace the battery cover.



**CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO STATE AND LOCAL LAW.**



## Charging Warnings



**WARNING:** Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

• **NEVER LEAVE CHARGING BATTERIES UNATTENDED DURING USE.**

• **NEVER CHARGE BATTERIES OVERNIGHT.**

- Never attempt to charge dead, damaged or wet battery packs.
- Never attempt to charge a battery pack containing different types of batteries.
- Never allow children under 14 years of age to charge battery packs.
- Never charge batteries in extremely hot or cold places or place in direct sunlight.
- Never charge a battery if the cable has been pinched or shorted.
- Never connect the charger if the power cable has been pinched or shorted.
- Never attempt to dismantle the charger or use a damaged charger.

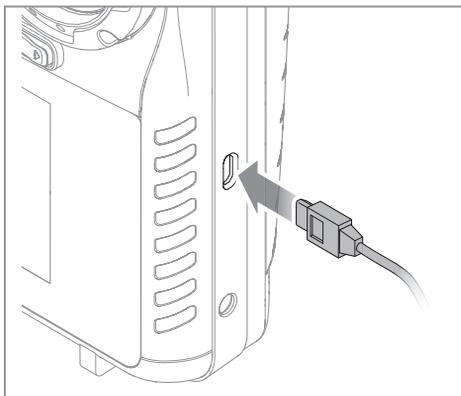
- Never drop charger or batteries.
- Always use only rechargeable Li-Ion batteries designed for use with this type of charger.
- Always inspect the battery before charging.
- Always keep the battery away from any material that could be affected by heat.
- Always monitor the charging area and have a fire extinguisher available at all times.
- Always end the charging process if the battery becomes hot to the touch or starts to change form (swell) during the charge process.
- Always connect the charge cable to the charger first, then connect the battery to avoid short circuit between the charge leads. Reverse the sequence when disconnecting.
- Always connect the positive red leads (+) and negative black leads (-) correctly.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always charge in a well-ventilated area.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.

## Battery Charging



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

1. Connect the included USB cable first to either the included USB adapter, or an appropriate USB power source (2A max).
2. Connect the USB cable to the charge port of the transmitter. After approximately 45 seconds, the transmitter will briefly show a charge icon on the screen and the battery LED will flash blue.  
Charging a fully discharged battery will take approximately 5.5 hours.
3. While charging, you can check the current capacity of the battery by touching any button on the touchscreen. The battery icon will appear on the screen, giving a visual indication of the capacity.
4. When the charging process is complete, the battery LED will stay solid and the icon will show full capacity.
5. Unplug the USB cable from the transmitter.



## System Settings

**Battery Info:** Allows the user to check the current capacity of the transmitter battery and to monitor the power usage of the various functions of the transmitter.

**Language Select:** Allows the user to change between available languages.

**System Reset:** Resets the transmitter to the factory defaults.

**Date and Time:** Allows the user to change the time and how it displays as well as select the time zone.

**About Flight Mode:** Provides the user with the model and serial numbers and allows system software updates.

## Flight Settings

### Bind

#### Bind Model

To bind your aircraft receiver with the ST-10+:

1. With the transmitter powered off, put the aircraft in bind mode.
2. Power on the ST-10+. If the RC and Wi-Fi connecting dialogue appears, touch the screen anywhere outside of the pop up window to access the main menu.
3. Touch the "Model Select" button from the main menu. Click "OK" in the warning dialogue.
4. Select your model or create a new model if needed.
5. From the main menu, select "Flight Settings" and click "OK" in the warning dialogue.
6. Select "Bind" and select your model from the list.
7. Click "OK" after the connection has been established.
8. Return to the main menu. Your model should now connect to the ST-10+.

#### Bind Camera

To bind your camera to the ST-10+:

1. Power on the camera/gimbal.
2. Select Flight Settings from the main menu on the ST-10+.
3. Select the Bind option.
4. Under Camera, select the CGO2 network (CGO2\_\*\*\*\*\*).
5. Touch the Password line on the screen and enter the password "1234567890" on the touchscreen.
6. Select OK.
7. The ST-10+ will indicate a successful connection. Select OK.
8. Return to the Main Menu.
9. The live video feed is now visible on the ST-10+ display.
10. Double tap on the image to expand the video to fill the display. Double tap again to return to the main menu with live video.

#### Camera Select

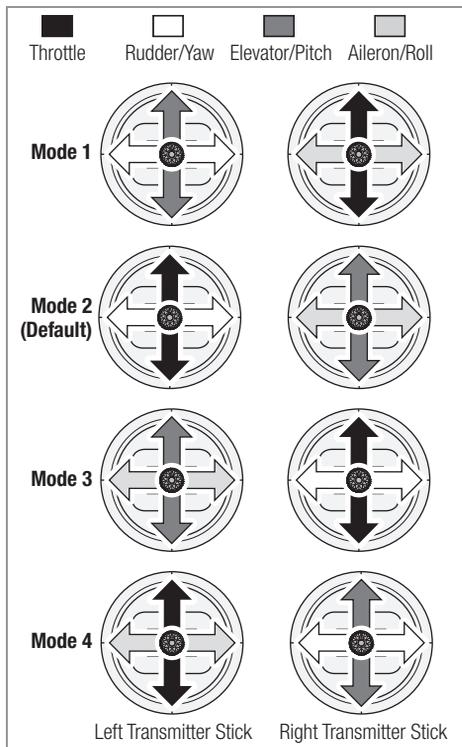
To select a camera:

1. Choose the desired camera from the list of camera profiles and click "Select."
2. Click "OK."
3. Return to the main menu.

**NOTICE:** Streaming video from a camera/gimbal to the ST-10+ and to a separate phone/tablet (or another Yuneec transmitter/personal ground station) at the same time is not recommended as it will result in a very significant lag in the video downlink.

#### Mode Select

Select the desired transmitter control mode from the list. Mode 2 is the default control mode.



#### Hardware Monitor

The hardware monitor gives a graphic representation of all current control input positions.

#### Other Settings

##### Units

Change the units to either Metric or Imperial.

## Model Select

Model Select allows you to choose from any model that has been previously created or to add a new model to the ST-10+.

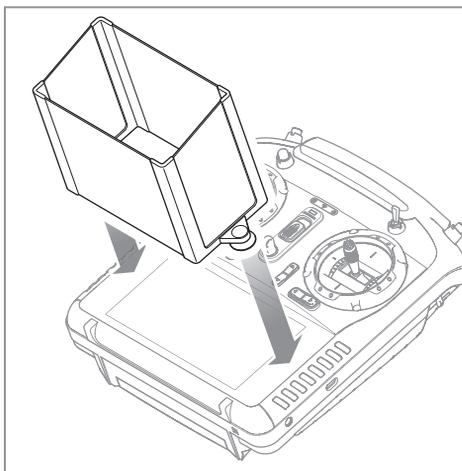
To select a model:

1. From the main menu, touch Model Select and select "OK" in the warning screen.
2. Select the desired model from the list shown. The ST-10+ will return to the main screen and connect to your model.

## Accessories

The ST-10+ includes an optional neckstrap and sunshade.

The sunshade is held to the display screen using suction cups as shown in the illustration.



## Additional Operating Information

For additional information regarding the operation, telemetry, available flight modes and calibration of the

Blade ST-10+ Ground Station Transmitter see the video link on the product page at [www.horizonhobby.com](http://www.horizonhobby.com)

## 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.

**NOTICE:** 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.**

### Warranty and Service Contact Information

Country of Purchase	Horizon Hobby	Contact Information	Address
United States of America	Horizon Service Center (Repairs and Repair Requests)	<a href="http://servicecenter.horizonhobby.com/RequestForm/">servicecenter.horizonhobby.com/RequestForm/</a>	4105 Fieldstone Rd Champaign, Illinois, 61822 USA
	Horizon Product Support (Product Technical Assistance)	<a href="http://www.quickbase.com/db/bghj7ey8c?a=GenNewRecord">www.quickbase.com/db/bghj7ey8c?a=GenNewRecord</a> 888-959-2304	
	Sales	<a href="mailto:sales@horizonhobby.com">sales@horizonhobby.com</a> 888-959-2304	
United Kingdom	Service/Parts/Sales: Horizon Hobby Limited	<a href="mailto:sales@horizonhobby.co.uk">sales@horizonhobby.co.uk</a> +44 (0) 1279 641 097	Units 1-4 , Ployters Rd, Staple Tye Harlow, Essex, CM18 7NS, United Kingdom
Germany	Horizon Technischer Service	<a href="mailto:service@horizonhobby.de">service@horizonhobby.de</a>	Christian-Junge-Straße 1 25337 Elmshorn, Germany
	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	
France	Service/Parts/Sales: Horizon Hobby SAS	<a href="mailto:infofrance@horizonhobby.com">infofrance@horizonhobby.com</a> +33 (0) 1 60 18 34 90	11 Rue Georges Charpak 77127 Lieusaint, France
China	Service/Parts/Sales: Horizon Hobby – China	<a href="mailto:info@horizonhobby.com.cn">info@horizonhobby.com.cn</a> +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.

## IC Information

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## FAA Information

Prior to flying, contact your local or regional modeling organizations for guidance and familiarize yourself with the current local rules and FAA regulations governing model aviation in your location.

More information about model aviation can be found at [www.modelaircraft.org](http://www.modelaircraft.org).

The Federal Aviation Administration can be found online at [www.faa.gov](http://www.faa.gov).

## AMA National Model Aircraft Safety Code

<http://www.modelaircraft.org/files/105.PDF>

## 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.

