

# SPEKTRUM SR215, SR315, SR515 SPORT SURFACE RECEIVER

SPEKTRUM SR215, SR315, SR515 SPORT-OBERFLÄCHENEMPFÄNGER

RÉCEPTEUR DE SURFACE DE SPORT SPEKTRUM SR215, SR315, SR515

SPEKTRUM SR215, SR315, SR515 RICEVITORE DI SUPERFICIE SPORT

#### 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:

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.

**CAUTION:** 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.

#### WARRANTY REGISTRATION

Visit www.spektrumrc.com/registration today to register your product.

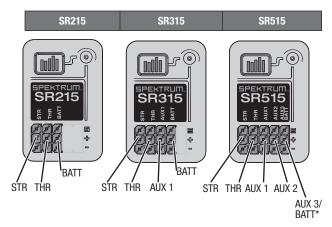
## Spektrum Sport Surface Receivers

The SR215, SR315, and SR515 receivers are compatible with Spektrum DSM2® and DSMR® radio control surface systems. They are not compatible with DSM transmitters or Spektrum aircraft systems.

For more information on Spektrum radio control system visit: http://www.spektrumrc.com

## **Specifications**

	SR215	SR315	SR515
Туре	2-Channel Sport Receiver	3-Channel Sport Receiver	5-Channel Sport Receiver
Dimensions $(L \times W \times H)$	32.5mm× 21.5mm × 13.4mm		
Antenna Length	90mm	90mm	120mm
Channels	2	3	5
Weight	6g		
Band	2404 MHz – 2476 MHz		
Voltage Range	3.5–9.6V		



\*IMPORTANT: AUX 3 on the SR515 shares the servo port with the battery. A Y harness (SPMA3008) is required on the AUX 3 port to use all 5 channels with a receiver battery.

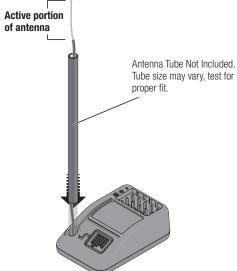
### Receiver Installation

### Installing the Receiver

Install the receiver in the normal position recommended by the vehicle's manufacturer. Double-sided tape or foam may be used to secure the receiver in place.

## **Receiver Antenna**

The SR215, SR315 and SR515 receivers feature a coaxial antenna design for easy installation in almost any model. Think of the last 1 inch (32mm) on the tip of the antenna as the active portion of the antenna, the coaxial portion leading up to it is just an extension. Install the antenna so the active portion is positioned as high as possible in the vehicle, and not "in the shadow" of any carbon fiber or metal. The case of the receiver can accept an antenna tube directly, making optimal antenna placement easy (antenna tube not included).



**WARNING:** Do not kink, cut or damage the antenna wire. The antenna is made of a coaxial wire; if the outer sheath becomes damaged, the receiver will not work properly. If the antenna is damaged in any way, replace the antenna before attempting to use the receiver.

## **Binding**

The SR215, SR315 and SR515 receivers must be bound to the transmitter before they will operate. Binding is the process of teaching the receiver the specific code of the transmitter so it will only connect to that specific transmitter.

### **Failsafe**

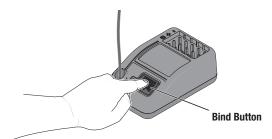
Failsafe position is set during binding. In the unlikely event that the radio link is lost during use, the receiver will drive all channels to its pre-programmed failsafe position.

#### Standard Mode

If loss of signal occurs, SmartSafe™ technology moves the throttle channel to its designated failsafe position (low throttle) that was set during binding. All other channels hold their last position. When the receiver detects signal from the transmitter, normal operation resumes.

#### Gas Mode

Preset failsafe is ideal for most nitro/ gas vehicles. With preset failsafe, all channels go to their preset failsafe positions if the signal is lost, preventing an out of control situation. When the receiver detects signal from the transmitter, normal operation resumes.



### Standard Mode

1	Push and Hold Bind Button		
2	Power on Reciever		
3	Release Button after RX goes into Bind Mode (flashing LED)		
4	Place transmitter in Bind Mode and finish Binding.		

#### Gas Mode

1	Push and Hold Bind Button		
2	Power on Reciever, keep Bind button depressed until binding is complete		
3	Place transmitter in Bind Mode and finish Binding.		
4	When the LED turns solid, power off the reicever, and then release the Bind Button		

### Testing Failsafe

Secure the vehicle with the wheels off the ground. Test Failsafe by turning the transmitter off and noting how the receiver responds.

## Requirements

Inadequate power systems that are unable to provide the necessary minimum voltage to the receiver during operation have become the number one cause of control failures. Some of the power system components that affect the ability to properly deliver adequate power include:

- Receiver battery pack (number of cells, capacity, cell type, state of charge)
- The ESC's capability to deliver current to the receiver in electric vehicles
- The switch harness, battery leads, servo leads, regulators etc.

The SR215, SR315, and SR515 have a minimum operational voltage of 3.5V; it is highly recommended the power system be tested per the guidelines below.

### **Recommended Power System Test Guidelines**

If a questionable power system is being used (e.g. small or old battery, ESC that may not have a BEC that will support high-current draw, etc.), it is recommended that a voltmeter be used to perform the following tests.

The Hangar  $9^{\circ}$  Digital Servo & Rx Current Meter (HAN172) is the perfect tool to perform the test below.

Plug the voltmeter into an open channel port in the receiver and with the system on, or simply monitor the voltage on a telemetry capable transmitter, gently apply pressure to the wheels to put a steering load on the servo, while monitoring the voltage at the receiver. The voltage should remain above 3.5V even when all servos are heavily loaded.

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

### **FCC Information**

#### FCC ID: BRWSRIRVINGV1

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**

## SR215, SR315, SR515 Spektrum Surface Receivers SPMSR215, SPMSR315, SPMSR515

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 Road.

Champaign, IL 61822

Email: compliance@horizonhobby.com

Web: HorizonHobby.com

## **IC** Information

CAN ICES-3 (B)/NMB-3(B)

#### IC: 6157A-SRIRVINGV1

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.

(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.





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