



SPEKTRUM®

SR2000 Instruction Manual

SR2000 Bedienungsanleitung

Manuel d'utilisation SR2000

Manuale di istruzioni SR2000

NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. 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 attempt disassembly, use with incompatible components or augment product in any way without the approval of Horizon Hobby, Inc. 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, Inc. authorized dealer to ensure authentic high-quality Spektrum product. Horizon Hobby, Inc. 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.

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.

Waterproof Component

Your new Spektrum™ SR2000 has been designed and built to allow you to operate the product in many “wet conditions”, including puddles, creeks, wet grass, snow and even rain.

While waterproof, this component has not been designed to be immersed in water for long periods of time and should NOT be treated like a submarine. In addition, most metal parts, including any screws and nuts, as well as the contacts in the electrical cables, will be susceptible to corrosion if additional maintenance is not performed after running in wet conditions.

To maximize the long-term performance of your SR2000 and to keep the warranty intact, it should only be used as described in the “Usage Conditions” section of this manual. Additionally, the procedures described in the “Wet Conditions Maintenance” section must be performed regularly if you choose to run in wet conditions. If you are not willing to perform the additional care and maintenance required, then you should not operate your vehicle in those conditions.

CAUTION: Failure to exercise caution while using this product and comply with the following precautions could result in product malfunction and/or void the warranty.

General Precautions

Read through the wet conditions maintenance procedures and make sure that you have all the tools you will need to properly maintain your receiver.

Do not operate your receiver where it could come in contact with salt water (ocean water or water on salt-covered roads), contaminated or polluted water. Salt water is very conductive and highly corrosive, so use caution.

Usage Conditions

Your receiver will operate successfully in any of the following, individual-usage scenarios:

- 2 hours continuous operation in dew-covered (damp) grass or vegetation.
- 2 hours continuous operation in heavy fog (95% humidity, saturated air, condensing water).
- 1 hour continuous operation in light rain (< 0.10 in / 2.5mm per hour).
- 15 minutes continuous operation in heavy rain (> 0.30 in / 7.6mm per hour).
- 1 hour continuous operation in light sleet (< 0.10 in / 2.5mm per hour).
- 1 hour continuous operation in light snow (< 0.25 in / 6.35mm per hour).
- 45 minutes continuous operation in standing or running fresh water (the water level should always remain below the vehicle frame), or constant splashing water, without any immersion of waterproof component(s).
- 5 minutes continuous operation in standing or running fresh water (the water level should never rise higher than 0.5 in (about 10 mm) above the vehicle frame), constant splashing water, or frequent, intermittent immersion of waterproof component(s).
- 1 hour continuous operation in damp sand, dirt, mud or snow (the material level should always be below the vehicle frame), constant splatter without any immersion or coverage of waterproof component(s).

Furthermore, when appropriate maintenance procedures (as described below) are performed promptly following exposure, the receiver will remain best protected from corrosion or other long-term, water-related damage.

Wet Conditions Maintenance

Gently rinse the mud and dirt off the vehicle with a garden hose.

Remove the battery pack(s) and dry the contacts.

If you have an air compressor or a can of compressed air available, blow off the receiver to help remove any water that may have gotten into small crevices or corners. Dry any water that may be inside a recessed connector housing.

Let the receiver air dry before you store it. Water may continue to seep or evaporate out of tight areas for a few hours.

NOTICE: Never use a pressure washer to clean your vehicle.

NOTICE: The SR2000 is waterproofed for use in wet conditions. Make sure the other components in your vehicle are waterproof or water-resistant before driving in wet conditions.

SR2000 Instruction Manual

The Spektrum™ SR2000 DSMR™ Micro Race receiver is compatible with all Spektrum DSMR transmitters and is also backwards compatible with DSM2® transmitters. The SR2000 receiver is NOT compatible with DSM® transmitters.

Specifications

Type: DSMR

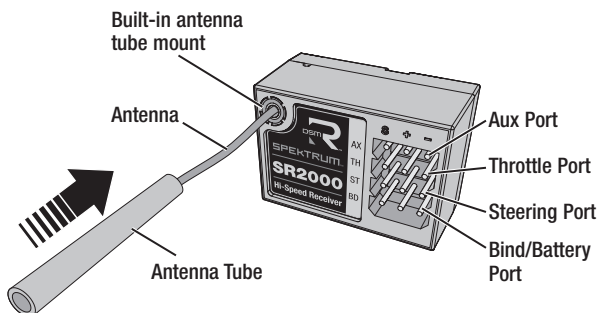
Dimensions (LxWxH): 1.00 x .70 x .50 in (25.5 x 17.6 x 13.6mm)

Channels: 2

Weight: 2.0 oz (5.5 g)

Band: 2.4GHz

Voltage Range: 3.5–9.6V



Aux channel

The Aux channel can operate as a 3rd servo channel, or as a power supply for a personal transponder. If 5.5ms frame rate is selected in the transmitter, only two channels, Steering and Throttle, are operational. The Aux channel can be used to power a personal transponder or lights.

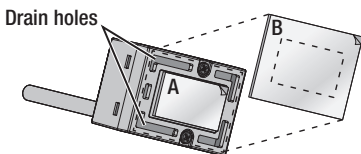
If a frame rate other than 5.5ms is selected, the Aux channel will operate as a 3rd servo channel.

IMPORTANT: When using the receiver with a DSMR transmitter, you must re-bind any time you change the frame rate in the transmitter.

NOTICE: The DX3R, DX3R Pro and the DX4R Pro are required for 5.5ms frame rate.

Receiver Connection and Installation

Install the Receiver in your vehicle using double-sided foam servo tape. Foam servo tape will hold the receiver in place and help isolate it from vibrations. The receiver includes two pieces of double-sided foam tape. If you plan on driving your vehicle in wet conditions, use the smaller piece of foam tape (**A**). Otherwise, the larger piece of foam tape (**B**) prevents dust from entering the receiver case.



Mount the antenna up and away from the vehicle in the included antenna tube. The higher up the antenna is, the better signal it will receive.

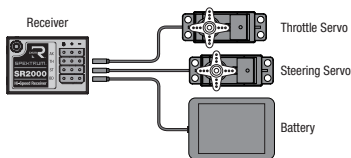
NOTICE: Do not cut or modify the antenna.

Failsafe

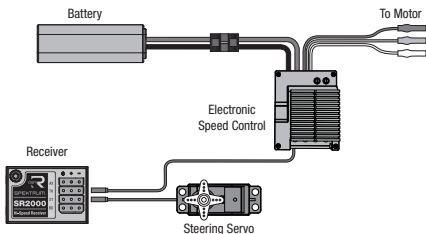
The throttle failsafe position is set during binding. In the unlikely event that the radio link is lost during use, the receiver will drive the throttle channel to its pre-programmed failsafe position (normally neutral or full brakes). If the receiver is powered on prior to turning on the transmitter, the receiver will enter the failsafe mode, driving the throttle channel to its preset failsafe position. When the transmitter is turned on, normal control is resumed.

IMPORTANT: Failsafe activates only in the event that signal is lost from the transmitter. Failsafe will NOT activate in the event that receiver battery power decreases below the recommended minimums or power to the receiver is lost.

Powering the receiver with a separate receiver pack



Powering the receiver with an ESC



Binding Receiver to Transmitter

In order to operate, the receiver must be bound to the transmitter. Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. When a receiver is bound to a transmitter/model memory, the receiver will only respond to that specific transmitter/model memory.

Binding

1. With the receiver off, insert the bind plug into the BIND port in the receiver.
2. Power the receiver through any port. If an ESC is being used, connect the ESC lead to the throttle channel port. The orange LED will flash continuously, indicating that the receiver is in bind mode.
3. With the throttle channel in the desired preset failsafe position (normally neutral), put your transmitter in bind mode. Continue holding the failsafe position until the binding process is complete.
4. The bind process is complete when the orange LED on the receiver is solid.
5. Remove the bind plug from the receiver and store it in a convenient place. Failure to remove the bind plug will result in the receiver entering bind mode the next time you power on the receiver.

You must rebind the transmitter and receiver if you:

- change the servo reverse after binding.
- want to use the receiver with a different model memory.
- are using the receiver with a DSMR transmitter and you change the frame rate in the transmitter.

2.4GHz Troubleshooting Guide

Problem	Possible Cause	Solution
The system will not connect	Your transmitter and receiver are too close together	Move transmitter 1 to 3 meters from receiver
	You are around metal objects	Move to an area with less metal
	The receiver is not bound to the active model memory	Check model selected and ensure you are bound to that model
	Your transmitter was accidentally put into bind mode and is no longer bound to your receiver	Rebind your transmitter and receiver
The receiver goes into fail-safe mode a short distance away from the transmitter	Check the receiver antenna to be sure it is not cut or damaged	Replace the receiver or contact Horizon Product Support
		Make sure your receiver antenna is in an antenna tube and is above the vehicle
The receiver stops responding during operation	Inadequate battery voltage	Charge or replace the receiver batteries. Spektrum receivers require at least 3.5V to operate (We recommend using a 6V receiver pack). An inadequate power supply can allow voltage to momentarily drop below 3.5V and cause the receiver to brown out and reconnect
	Loose or damaged wires or connectors between battery and receiver	Check the wires and connection between the battery and receiver. Repair or replace wires and/or connectors

1-Year Limited Warranty

What this Warranty Covers

Horizon Hobby, Inc., (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 years 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, 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	
		888-959-2306	
Sales	sales@horizon-hobby.com 888-959-2306		
United Kingdom	Service/Parts/Sales: Horizon Hobby Limited	sales@horizon-hobby.co.uk +44 (0) 1279 641 097	Units 1–4 , Ployters Rd, Staple Tye Harlow, Essex, CM18 7NS, United Kingdom
Germany	Horizon Technischer Service	service@horizon-hobby.de	Christian-Junge-Straße 1 25337 Elmshorn, Germany
	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	
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@horizon-hobby.com.cn +86 (021) 5180 9868	Room 506, No. 97 Changshou Rd. Shanghai, China 200060

Compliance Information for the European Union

Declaration of Conformity
(in accordance with ISO/IEC 17050-1)

No. HH2013101703

Product(s): SPM SR2000 2 Channel DSMR Micro

Item Number(s): SPMSR2000

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:

EN 301 489-1 V1.9.2: 2012

EN 301 489-17 V2.1.1: 2009



Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
Oct 17, 2013

A handwritten signature in black ink, appearing to read 'Robert Peak', written in a cursive style.

Robert Peak
Chief Financial Officer
Horizon Hobby, Inc.



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 collection 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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