

SPEKTRUM®

SR4000T/SR6000T

Telemetry Receiver Instruction Manual

Telemetrie Empfänger

Récepteur avec télémétrie intégrée

Ricevente con Telemetria

NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit horizonhobby.com and click on the support tab for this product.

Meaning of Special Language

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

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

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

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

Age Recommendation: Not for children under 14 years. This is not a toy.



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.



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.community.spektrumrc.com today to register your product.

Water-Resistant Component

Your new Horizon Hobby SR4000T/SR6000T Telemetry Receiver has a special water-resistant coating on the electronics to ensure reliable performance in higher than average moisture conditions. This conformal coating can offer mild protection from light drops of water.

- DO NOT submerge this product under water for any period of time. If it is submerged, it may result in damage or loss of function.
- DO NOT pour water onto or allow excess water to come in direct contact with the product.
- DO NOT operate this product in heavy rain or snow.
- DO NOT expose this product to salt water (ocean water or water on salt-covered roads), contaminated or polluted water.

In case of excess exposure to water or debris, immediately wipe down the SR4000T/SR6000T with a soft cloth, and allow it to fully dry before next use.

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

NOTICE: Make sure the other components in your vehicle are waterproof or water-resistant before driving in wet conditions.

SR4000T/SR6000T Telemetry Receiver

The Spektrum™ SR4000T/SR6000T Telemetry Receiver is compatible with all Spektrum DSMR® surface transmitters. Telemetry functions require a Spektrum transmitter capable of telemetry.

Specifications

Type: DSMR with internal telemetry

Dimensions (LxWxH): 1.5 x 1.1 x 0.6 in (37.5 x 27.7 x 15.7mm)

Antenna Length: 8.27 in (210mm)

Channels: 4 (SR4000T); 6 (SR6000T)

Weight: 0.3 oz (9.2 g)

Band: 2.4GHz

Voltage Range: 3.5–9.6V

A: Voltage sensor port

B: Temperature sensor port

C: Bind Button

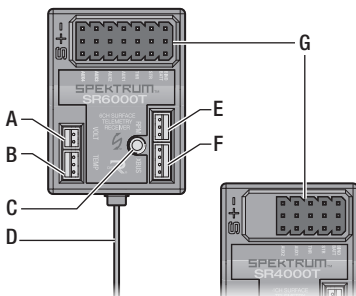
D: Antenna

E: RPM sensor port

F: XBUS Port

G: Servo ports-

- Bind/Battery
- Steering
- Throttle
- Aux1-Aux4
(SR4000T: Aux1, Aux2)



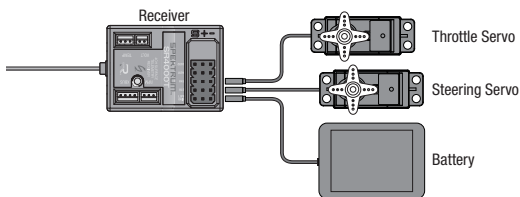
Receiver Installation and Setup

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.

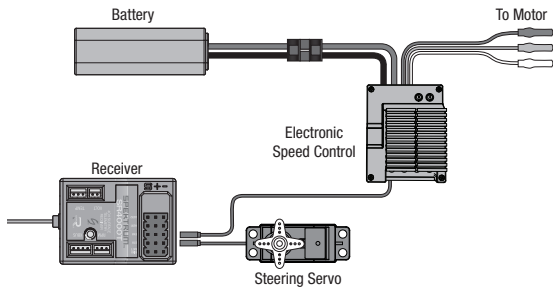
Mount the antenna up and away from the vehicle. The higher up the antenna is, the better signal it will receive.

NOTICE: Do not cut or modify the antenna.

Powering the receiver with a separate receiver pack



Powering the receiver with an ESC



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 (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.

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. Push and hold the bind button on the receiver while powering up the receiver. The orange LED will flash continuously, indicating that the receiver is in bind mode.

Tip: It is possible to use a bind plug in the BIND/BATT port if desired.

2. With all channels 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.
3. The bind process is complete when the orange LED on the receiver is solid.



CAUTION: When the bind process is complete, the throttle and steering channels are active. Keep hands and loose objects away from all spinning parts on the vehicle.

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.
- are using the receiver in 5.5ms and want telemetry, you must rebind in 11 ms.

Aux channels

The Aux channels can operate as extra servo channels, 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 channels can be used to power a personal transponder or lights.
- If a frame rate other than 5.5ms is selected, the Aux channels will operate as extra servo channels.

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 DX4R Pro or DX6R are required for 5.5ms frame rate.

Telemetry

The Spektrum SR4000T/SR6000T Telemetry Receiver features 4 integrated telemetry ports that are compatible with Spektrum telemetry capable transmitters.

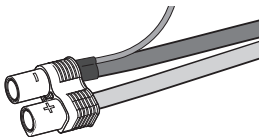
The Telemetry ports include:

- Voltage
- Temperature
- RPM
- XBus Port (Connect additional telemetry sensors)

The Spektrum SR4000T/SR6000T Telemetry Receiver has the Voltage Sensor and the Temperature Sensors included in the box.

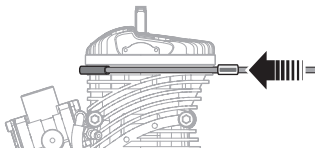
Voltage Sensor

- Plug the voltage sensor (SPMA9570) into the VOLT port on the SR4000T/SR6000T.
- Attach the stripped end of the wire to the -Negative (Black) wire of the voltage source. Typically, you would solder the wire to the battery connector.



Temperature Sensor

- Plug the Temperature sensor (SPMA9571) into the TEMP port on the SR4000T/SR6000T.
- Loop the wire around the head of a nitro/gas engine, snugging the plastic sleeve to secure the wire. The mounting position on nitro/gas engines will result in different temperature readings. Experiment with different positions on the engine head for best results.



- Loop the wire around a battery pack or electric motor and secure in place with tape.

For information on installing other Spektrum Telemetry Sensors visit <http://www.spektrumrc.com>

2.4GHz Troubleshooting Guide

Problem	Possible Cause	Solution
The system will not connect	Your transmitter and receiver are too close together	Move transmitter 8 to 12 feet away from receiver
	You are near metal objects	Move to an area with less metal
	The receiver is bound to a different model memory	Make sure the correct model memory is active in your transmitter
	Your transmitter was placed into bind mode and is no longer bound to your receiver	Rebind your transmitter and receiver
The receiver goes into failsafe mode a short distance away from the transmitter	Check for damage on the receiver antenna	Make sure your receiver antenna is in an antenna tube and is above the vehicle
		Replace the receiver or contact Horizon Product Support
The receiver stops responding during operation	Low receiver battery voltage If the battery voltage is low, it may drop below 3.5V momentarily, causing the receiver to brown-out, then reconnect	Charge the receiver or vehicle battery. Spektrum receivers require at least 3.5V to operate
	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, 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 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.

5-14-2015

Warranty, Service and Customer 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)	productsupport@horizonhobby.com	
		877-504-0233	
Sales	websales@horizonhobby.com 800-338-4639		
United Kingdom	Service/Parts/Sales: Horizon Hobby Limited	sales@horizonhobby.co.uk	Units 1-4, Ployters Rd, Staple Tye, Harlow Essex, CM18 7NS United Kingdom
		+44 (0) 1279 641 097	
Germany	Horizon Technischer Service	service@horizonhobby.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	11 Rue Georges Charpak 77127 Lieusaint, France
		+33 (0) 1 60 18 34 90	

FCC Information

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 to an outlet on a circuit different from that to which the receiver is connected.

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.


Notice: Modifications to this product will void the user's authority to operate this 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.

Compliance Information for the European Union

 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 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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