

2-Channel DSM Stick Surface Transmitter

2 Kanal DSM Stick Surface Fernsteuersender

2 voies Emetteur de surface DSM à manches

Trasmettitore 2 canali a stick per auto e scafi Sistema DSM **NOTICE:** All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up-todate product literature, visit http://www.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 little or no possibility of injury.

<u>CAUTION</u>: 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 and NOT a toy. 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.



✓!\ WARNING AGAINST COUNTERFEIT PRODUCTS

Thank you for purchasing a genuine Spektrum product. 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 DSM2 or Spektrum.

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FRANCE RF SETTING

The DX2M has a France RF setting that complies with French regulations. The France RF setting should only be turned on when operating your transmitter in France outdoors. See page 8 for more details.

INTRODUCTION

The Spektrum DX2M 2-channel stick surface transmitter incorporates 2.4GHz DSM technology in a simple easy to use design. The DX2M is compatible with Spektrum DSM, DSM2 and Marine surface receivers making it a great choice for your boat, car or truck applications.

TRANSMITTER CONTROL IDENTIFICATION

WARNING: ENSURE FUTURE ANTENNA SAFETY: Do not attempt to use the antenna to bear any weight, pick up the transmitter by the antenna or alter the antenna in any way. If the transmitter antenna or related components become damaged the output strength can be severely impeded which will likely lead to a crash, injury and property damage.



RECEIVER COMPATIBILITY

The DX2M is compatible with all current Spektrum™ DSM, DSM2 and marine surface receivers.

INSTALLING THE TRANSMITTER BATTERIES

The DX2M requires 4 AA alkaline, heavy-duty or rechargeable batteries.

BATTERY INSTALLATION



Remove the battery door and install 4 AA batteries. Make sure the polarity of each corresponds with the diagram in the battery holder. Replace the battery door.

LOW BATTERY ALARM

When the battery voltage drops below 4.7 volts, an alarm sounds and the voltage LEDs flash. The batteries must be replaced immediately.

BINDING

You must bind the receiver to the transmitter before operating. Binding teaches the transmitter's specific code to the receiver so it only connects to that transmitter. These instructions explain how to bind most Spektrum surface receivers.

To bind a receiver, insert the bind plug in the Batt/Bind port.





MR200 shown above using an electronic speed controller

Power up the receiver. If using an electronic speed controller, plug the lead into the throttle port and turn on the switch. If using a receiver pack, plug the battery lead into any open port noting the polarity. The LED on the receiver will begin flashing.



SR300 shown above using a separate receiver pack



SR300 shown above using an ESC and a Dynamite® Speedpack™

3. Move the sticks on the transmitter to the desired failsafe positions.



4. Press and hold the bind button on the top of the transmitter while turning on the power switch. Release the bind button once the LEDs on the front of the transmitter flash and you hear a series of beeps. Within a few seconds the system should connect. Once connected, the LED on the receiver will go solid indicating the system is connected.

CAUTION: Continuing to hold the bind button during the binding process prevents preset failsafe positions from being learned by the receiver.



5. Remove the bind plug from the BATT/BIND port on the receiver before you power off the receiver. Store the plug in a convenient place.

Note: You must rebind when:

- Different failsafe positions are desired e.g,. when throttle or steering reversing has been changed.
- Changing receiver types e.g., changing from a DSM receiver to a DSM2 or Marine receiver.
- Binding the receiver to a different transmitter.

Note: Some Spektrum receivers like the SR3001 use a bind button rather than a bind plug. The binding process is the same with this receiver. However, instead of inserting the plug before powering up the receiver, press and hold the bind button while powering up the receiver to enter bind mode.

FAILSAFE

Failsafe positions are also set during binding. In the unlikely event that the radio link is lost during use, the receiver drives the servos to their preprogrammed failsafe positions (normally full brakes and straight steering). If the receiver is turned on prior to turning on the transmitter, the receiver enters failsafe mode, driving the servos to their preset failsafe positions. When the transmitter is turned on, normal control is resumed. Failsafe servo positions are set during binding (see Binding on the previous page).

SERVO REVERSING

The DX2M features servo reversing on the throttle and steering channels. The switches are located at the lower front of the transmitter. They are used to select the servo direction of each channel. You can change the switch position to normal (NOR) or reverse (REV).



STEERING TRIM

The steering trim slider adjust the steering trim when the wheel is centered. Move the slider left or right to change the steering trim (the steering at rest position). Normally steering trim is adjusted until the car tracks straight.



THROTTLE TRIM

The throttle trim slider adjusts the throttle trim when the throttle stick is released (neutral position). This is typically used to adjust the brakes. Move the slider to change the throttle trim (the throttle position at rest).



STEERING RATE

Steering rate (also known as dual rate) allows you to make on-the-fly steering travel adjustments using the steering rate dial. Steering rate limits the amount of travel of the steering servo. The steering rate cannot be greater than 100% and will never exceed the amount of steering travel set with the travel adjust dials.



THROTTLE 50/50, 70/30 SWITCH

The DX2M features a two-position throttle stick that adjusts the ratio of travel forward and backward. It can be either 50/50 or 70/30. The 50/50 throttle position offers symmetrical stick travel in both forward and backward directions. This is commonly used for boats that have proportional forward and proportional reverse control. The 70/30 throttle position provides a larger 70% forward stroke, offering more precise forward control for boats that use forward only. Note that many electronic speed controllers require the proper setting in order to arm the controller. It may be necessary to select 50/50 or 70/30 to arm your particular controller.

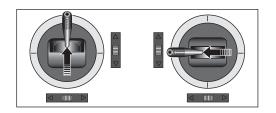


FRANCE RF SETTING

TO SET FRANCE MODE:

Push and hold the bind button on the top of the transmitter while pushing and holding the two sticks as shown below and then turn on the power switch.

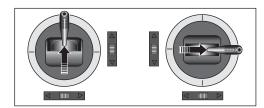
After hearing a series of increasing beep tones (low to high), release the trainer switch and the sticks. The France setting is now turned on.



TO SET STANDARD MODE:

Push and hold the bind button on the top of the transmitter while pushing and holding the two sticks as shown below and then turn on the power switch.

After hearing a series of decreasing beep tones (high to low), release the trainer switch and the sticks. The France setting is now turned off.



GENERAL NOTES

Radio controlled models are a great source of pleasure. Unfortunately, they can also pose a potential hazard if not operated and maintained properly. It is imperative to install your radio control system correctly. Additionally, your level of operating competency must be high enough to ensure you are able to control your model under all conditions. If you are a newcomer to radio controlled models, please seek help from an experienced modeler or your local hobby shop.

Safety Points to Obey for Modelers

- Ensure your batteries (both transmitter and receiver) have been properly charged for your model.
- Keep track of the time the system is turned on so you will know how long you can safely operate your DX2M.
- Check all servos and their connections prior to each run.
- Do not operate your model near spectators, parking areas or any other area that could result in injury to people or damage of property.

- Do not operate your model during adverse weather conditions. Poor visibility can cause disorientation and loss of control of your model.
- Do not point the transmitter antenna directly toward the model.
 The radiation pattern from the tip of the antenna is inherently low.
- Do not take chances. If at any time during the operation of your model you
 observe any erratic or abnormal operation, immediately stop operation
 of your model until the cause of the problem has been ascertained and
 corrected. Safety can never be taken lightly.

DX2M Troubleshooting Guide

Problem	Possible Cause	Solution
The system will not connect	 Your transmitter and receiver are too close together. They should be 1 to 4 feet apart. You are around metal objects. Your transmitter was accidentally put into bind mode and is not bound to your receiver anymore. 	 Move transmitter 1 to 4 feet from receiver. Move to an area with less metal. Rebind your transmitter and receiver.
The receiver goes into failsafe mode a short distance away from the transmitter	Check the receiver antenna to be sure it is not cut or damaged.	Replace SR3100 antenna (SPM9005) or contact Horizon Product Support Make sure your antenna is in an antenna tube and up in the air as high as possible
Receiver quits responding during operation	Inadequate battery voltage Loose or damaged wires or connections between battery and receiver	 Charge batteries. Spektrum receivers require at least 3.5V to operate. An inadequate power supply can allow voltage to momentarily drop below 3.5V and cause the receiver to brown out and reconnect. Check the wires and connection between battery and receiver. Repair or replace wires and/or connectors

WARRANTY AND REPAIR POLICY

Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship for a period of 1 (one) year from the date of purchase by the Purchaser.

1 Year Limited Warranty

Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

- (a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for all warranty claims.
- (b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.
- (c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion

of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any Product by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. 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 this Product, you are advised to return this 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).

WARRANTY SERVICES

Questions, Assistance and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact 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 direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to the Product Support Department.

Inspection or Repairs

If this Product needs to be inspected or repaired, please use the Horizon Online Repair 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 Repair Request is available at www.horizonhobby.com http://www.horizonhobby.com under the Repairs tab. 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 repair. 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 batteries to Horizon. If you have any issue with a battery, please contact the appropriate Horizon Product Support Department.

Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Repairs

Should your repair not be covered by warranty the repair 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 repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair 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 cashiers checks,

as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for inspection or repair, you are agreeing to Horizon's Terms and Conditions found on our website under the Repairs tab.

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.

Antenna Separation Distance

When operating your Spektrum transmitter, please be sure to maintain a separation distance of at least 5 cm between your body (excluding fingers, hands, wrists, ankles and feet) and the antenna to meet RF exposure safety requirements as determined by FCC regulations.

The following illustrations show the approximate 5 cm RF exposure area and typical hand placement when operating your Spektrum transmitter.





COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

SPMR2200



AT	BG	CZ	CY	DE
DK	ES	FI	FR	GR
HU	IE	IT	LT	LU
LV	MT	NL	PL	PT
R0	SE	SI	SK	UK



No. HH2010041702

Product(s): Spektrum DX2M Transmitter

Item Number(s): SPMR2200

Equipment class: 2

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/FC:

EN 60950 Safety

EN 300-328 Technical requirements for Radio equipment

EN 301 489-1, 301 489-17 General EMC requirements for Radio equipment

DE a Hal

Signed for and on behalf of: Horizon Hobby, Inc. Champaign, IL USA Apr 17, 2010

> Steven A. Hall Vice President

International Operations and Risk Management

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.

Horizon Service Center	4105 Fieldstone Road Champaign, IL 61822 USA	877-504-0233 Online Repairs visit www.horizonhobby.com/repairs/
Horizon Product Support	4105 Fieldstone Road Champaign, IL 61822 USA	877-504-0233 productsupport@horizonhobby.com
Horizon Hobby Limited	Units 1-4 Ployters Rd Staple Tye Harlow, Essex CM18 7NS United Kingdom	+44 (0) 1279 641 097 sales@horizonhobby.co.uk
Horizon Technischer Service	Hamburger Str. 10 25335 Elmshorn Germany	+49 4121 46199 66 service@horizonhobby.de
Horizon Hobby SAS	14 Rue Gustave Eiffel Zone d'Activité du Réveil Matin 91230 Montgeron	+33 (0) 1 60 47 44 70 infofrance@horizonhobby.com





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