



Spektrum S20 3S LiPo Battery USB-C 20W Charger



1026315
Created 09/25

**Instruction Manual
Bedienungsanleitung
Manuel d'utilisation
Manuale di Istruzioni**

SPMXC0050



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 or towerhobbies.com and click on the support or resources 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 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 alter 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: To reduce the risk of fire or electric shock, carefully follow these instructions.



CAUTION: This appliance is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- Children should be supervised to ensure they do not play with the appliance.
- Cleaning and user maintenance shall not be performed by children without supervision.

General 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.

- The power supply must deliver power at Safety Extra Low Voltage (SELV).
- 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 connect the charger to an automobile 12V battery while the vehicle is running.
- Never attempt to dismantle the charger or use a damaged charger.
- Never attach your charger to both an AC and a DC power source at the same time.
- Never connect the input jack (DC input) to AC power.
- Always use only rechargeable batteries designed for use with this type of charger in the correct programming mode.
- 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.
 - Charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
 - Do not expose the charger to liquid, vapor, or rain.
- **WARNING:** Never leave charger unattended, exceed maximum charge rate, charge with non-approved batteries or charge batteries in the wrong mode. Failure to comply may result in excessive heat, fire and serious injury.

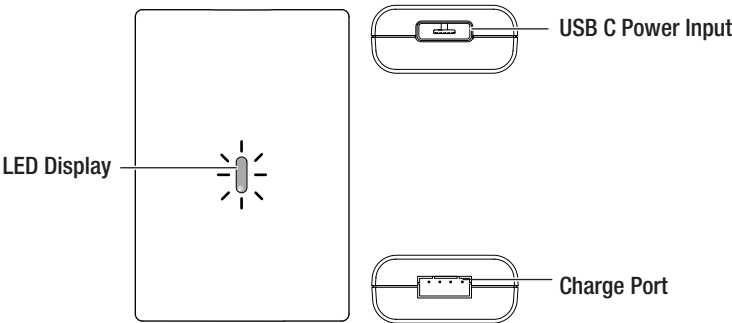
**CAUTION:** Always ensure the battery you are charging meets the specifications of this charger and that the charger settings are correct. Not doing so can result in excessive heat and other related product malfunctions, which can lead to user injury or property damage. Please contact Horizon Hobby or an authorized retailer with compatibility questions.

Specifications

Output Port Connector	JST-XH 4 Pin
Input Connector (required power supply, <i>not included</i>)	USB-C*
Input	5-12VDC, 3.0A max; Class III
Output	4.5-12.6VDC, 2.0A max, 20W max JST-XH only
Charge Current	2.0A max
Supported Battery Type	3S LiPo
Display	Red/Green
Operating Temperature	0–40°C (32–104°F)
Storage Temperature	-20~60°C (-4~140°F)
Dimensions	
Length	50mm
Width	36mm
Height	14.5mm
Weight	18g

*We recommend the Spektrum SPMX-1027 USB power supply to power this charger. You may use any USB power supply, but for optimal performance a USB 3.0 supply is required. Older USB power supplies may deliver much less power, resulting in longer charge times.

Diagram



Operating the Charger

Plug the USB-C connector into the charger and appropriate power supply.

The LED will flash red / green to indicate the charger is ready to charge the battery.

Charging

WARNING: Always check charging parameters before initiating the charge process. Charging any battery with improper settings, including charging a battery in the wrong mode, can result in property damage and fire.

Plug the 4 pin battery balance lead into the charger's output port. During the charging process, the LED flashes green. The LED changes to solid green once the battery is fully charged and ready to use.

Stopping the Charging Cycle

WARNING: Always stop the charging cycle or remove power supplied to the charger if you notice any irregularities (like a swollen battery) during charging.

To stop the charging cycle, disconnect the battery from the charger.

When Charging is Complete

The LED changes to solid green when the battery is fully charged.

Disconnect the battery from the charger.

Troubleshooting

When the charger has finished a solid green LED displays.

A solid, red LED indicates a charging error.

Make the necessary changes, and restart the charger to clear the error.

S20 Charger LED Color	
Solid Red	Charging error; ensure battery is healthy and properly connected to the charger
Green Flashing	Charge in progress
Solid Green	Charging complete
Red/Green Flashing	Charger is ready to charge

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, or (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 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.

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.

10/15

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/	2904 Research Road Champaign, Illinois, 61822 USA
	Horizon Product Support (Product Technical Assistance)	productsupport@horizonhobby.com 800-338-4639	
	Sales	websales@horizonhobby.com 800-338-4639	
European Union	Horizon Technischer Service	service@horizonhobby.de	Hanskampring 9 D 22885 Barsbüttel, Germany
	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	

FCC Information

FC Supplier's Declaration of Conformity **S20 USB-C 3S LiPo 20W**

Class 2 Battery Charger SPMXC0050

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

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

This Class B digital apparatus complies with Canadian ICES-003.

Compliance Information for the European Union

CE **EU Compliance Statement:** **S20 USB-C 3S LiPo 20W Class 2 Battery** **Charger SPMXC0050:** Hereby, Horizon

Hobby, LLC declares that the device is in compliance with the following: EU Low Voltage Directive 2014/35/EU; EU EMC Directive 2014/30/EU; RoHS 2 Directive 2011/65/EU; RoHS 3 Directive - Amending 2011/65/EU Annex II 2015/863.

The full text of the EU declaration of conformity is available at the following internet address: <https://www.horizonhobby.com/content/support-render-compliance>.



UK
CA

EU Manufacturer of Record:

Horizon Hobby, LLC
2904 Research Road
Champaign, IL 61822 USA

EU Importer of Record:

Horizon Hobby, GmbH
Hanskampring 9
22885 Barsbüttel Germany

WEEE NOTICE:



This appliance is labeled in accordance with European Directive 2012/19/EU concerning waste of electrical and electronic equipment (WEEE). This label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.



© 2025 Horizon Hobby, LLC.

The Horizon Hobby logo is a trademark or registered trademark of Horizon Hobby, LLC.

The Spektrum trademark is used with permission of Bachmann Industries, Inc.

All other trademarks, service marks and logos are property of their respective owners.

CN201721563463.4. Other patents pending.

SPMXC0050