

ARRMA ARA3505T2

ARRMA VORTEKS 223S DSC 2WD RTR Brushless Stadium Truck User Manual

Model: ARA3505T2

1. IMPORTANT SAFETY INFORMATION

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 use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. The product 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.

2. PRODUCT OVERVIEW

The ARRMA VORTEKS 223S BLX 2WD is a 1/10 scale Ready-to-Run (RTR) brushless stadium truck designed for durability and performance. It is capable of operating with 2S or 3S LiPo batteries, offering a range of speeds suitable for both beginners and experienced users. Key features include:

- 2S and 3S ready, for beginner to pro speed potential.
- Spektrum DSC (Dynamic Stability Control) and throttle limiting for enhanced control.
- Heavy-duty transmission and all-terrain suspension.
- Easy-access bottom-loading battery tray.
- Ready-to-run – requires separate purchase of battery and charger.



Figure 2.1: The ARRMA VORTEKS 223S DSC 2WD RTR Brushless Stadium Truck.

3. WHAT'S IN THE BOX

The ARRMA VORTEKS 223S package includes the following components:

- VORTEKS 223S BLX 2WD Stadium Truck RTR
- Spektrum SLT 45A 2-in-1 Waterproof ESC & Receiver 2S/3S with DSC
- Spektrum 3660 4000Kv Brushless Motor
- Spektrum SLT2 2.4GHz Transmitter
- Spektrum S681 Metal-Geared Waterproof Digital Servo
- AA Transmitter Batteries (for Spektrum SLT2 Transmitter)
- 2mm Hex Driver
- 2.5mm Hex Driver
- Wheel Wrench/Shock Tool
- Product Manual (this document)

4. SETUP

4.1 Battery and Charger Requirements

The ARRMA VORTEKS 223S does **NOT** include a LiPo battery or charger. These items must be purchased separately. The vehicle is compatible with 2S (7.4V) or 3S (11.1V) LiPo batteries. Ensure your chosen battery fits within the maximum tray dimensions:

Battery Tray Max Dimensions: 140mm x 50mm x 35mm / 5.51" x 1.97" x 1.38" inches



Figure 4.1: Required LiPo batteries (2S or 3S) and charger are not included and must be purchased separately. Observe battery tray dimensions for compatibility.

4.2 Transmitter Setup

1. Install the included AA batteries into the Spektrum SLT2 2.4GHz Transmitter.
2. Ensure the transmitter is powered on before powering on the vehicle.
3. If the vehicle does not respond to the transmitter, refer to the troubleshooting section or the Spektrum SLT2 manual for binding instructions.

4.3 Vehicle Preparation

1. Carefully install the charged LiPo battery into the battery tray, ensuring it is secured.
2. Connect the battery to the ESC.
3. Ensure all wires are clear of moving parts.
4. Check that all wheels are securely fastened.

5. OPERATING YOUR VORTEKS 223S

5.1 Powering On/Off Sequence

1. Turn on the Spektrum SLT2 Transmitter.
2. Connect the charged LiPo battery to the ESC in the vehicle.
3. Turn on the vehicle's ESC switch.
4. To power off, reverse the sequence: turn off the ESC, then disconnect the battery, then turn off the transmitter.

5.2 Driving Controls

Use the steering wheel on the transmitter to control direction and the trigger for throttle (forward/reverse) and brake.

5.3 Dynamic Stability Control (DSC)

The integrated Dynamic Stability Control (DSC) system assists in maintaining vehicle control, especially on challenging surfaces. It automatically corrects steering input as needed. The DSC system offers four selectable modes, allowing you to adjust the level of assistance based on your driving skill and terrain. Consult the Spektrum SLT2 manual for details on adjusting DSC modes.

5.4 Throttle Limiting

The Spektrum SLT2 radio features a throttle limiter switch, allowing you to set the maximum throttle output to 50%, 75%, or 100%. This feature is useful for new drivers or when operating in confined spaces, enabling a gradual increase in speed as skill and confidence grow.



Figure 5.1: The VORTEKS 223S in operation on a dirt track.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your VORTEKS 223S.

- **Cleaning:** After each use, especially in dusty or wet conditions, clean the vehicle to remove dirt and debris. Use a soft brush or compressed air. Avoid using water directly on electronics.
- **Inspection:** Regularly inspect all components for damage, wear, or loose fasteners. Pay attention to suspension arms, shock absorbers, drivetrain components, and steering linkages.
- **Lubrication:** Apply appropriate lubricants to moving parts as recommended in the full product manual (if available).
- **Tire Care:** Check tires for wear and damage. Ensure wheel nuts are tight.



Figure 6.1: Side profile of the VORTEKS 223S, showing suspension and wheel details.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your VORTEKS 223S.

Problem	Possible Cause	Solution
Vehicle does not respond to transmitter.	Transmitter or vehicle not powered on; batteries low; binding issue.	Ensure both are powered on. Check battery levels. Re-bind transmitter to receiver (refer to Spektrum SLT2 manual).
Loss of power or erratic behavior.	Low vehicle battery; loose connections; motor/ESC overheating.	Charge battery. Check all electrical connections. Allow components to cool down.

Problem	Possible Cause	Solution
Steering not centered or inconsistent.	Steering trim incorrect; damaged servo; loose steering components.	Adjust steering trim on transmitter. Inspect servo and steering linkages for damage or looseness.
Vehicle pulls to one side.	Steering trim incorrect; suspension imbalance; bent component.	Adjust steering trim. Check suspension for damage or uneven settings. Inspect for bent axles or linkages.

8. SPECIFICATIONS

Detailed specifications for the ARRMA VORTEKS 223S DSC 2WD RTR Brushless Stadium Truck:

- **Product Dimensions:** 20.5 x 14.8 x 8.6 inches
- **Item Weight:** 10.75 pounds
- **Model Number:** ARA3505T2
- **Manufacturer:** Horizon Hobby
- **Recommended Age:** 0 - 8 years (*Note: Direct adult supervision is required for children.*)
- **Batteries Required (Transmitter):** 4 AA batteries (included)
- **Batteries Required (Vehicle):** 2S or 3S LiPo (not included)

9. WARRANTY AND SUPPORT

For warranty information, technical support, or replacement parts, please contact the manufacturer, Horizon Hobby, LLC. Refer to the official Horizon Hobby website or the original product packaging for specific contact details and warranty terms.

This manual is intended for informational purposes only. Specifications and contents are subject to change without notice.