

When Arrma first burst onto the RC scene, the 1/10 scale Raider instantly set the brand apart

ARRMA RAIDER XL BLX

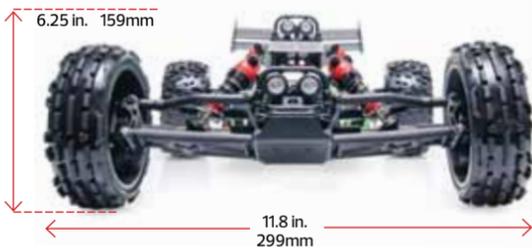
1/8-SCALE 2WD BUGGY | RTR

Arrma offers a different flavor of big-buggy fun with a super-sized 2WD design

with its dramatic desert buggy styling and unique chassis design. Since its debut, the Raider has gone brushless and seen spec tweaks, but no major changes—until now. For the latest iteration of the popular 2WD machine, Arrma has literally gone big. Now plumped up to 1/8 scale as the Raider XL and fully outfitted with a 3S-capable brushless power system (which is where it picks up the “BLX” designation), the super-sized car has the impressive footprint of an 1/8 scale buggy. But unlike 4WD 1/8 scale electric buggies, the Raider XL’s relatively low weight and more efficient 2WD powertrain allows you to enjoy big-buggy performance without carrying dual batteries or putting down major bank at the hobby store. Let’s move in for a closer look and get some wheel time with the Arrma Raider XL BLX.



PERFORMANCE TEST



The all-metal geartrain includes a sealed differential, shown here in render form.

METAL-GEAR TRANSMISSION

The Raider XL sticks with proven buggy tech in the drivetrain department, and stacks three gears in the traditional "differential on the bottom" configuration to get the big buggy rolling. All the internal gears are metal, and the diff has four spider gears for durability. A gasket and o-rings seal the all-metal differential, so you can tune it with silicone fluids if you really want to get into things. Further enhancing toughness are the pinion and spur gear, which get chunky 32-pitch teeth. The plastic spur gear would be the likely weak point in a transmission overload situation, but in that scenario the slipper clutch will spare the gear from popping teeth. It's a standard dual-pad design with aluminum pressure plates and hexagonal pads that fit into the spur gear—nothing unusual, and it all works as well as it does in many other cars. The final link from transmission to wheels is made via steel dogbones, which certainly do the job but are a bit of a surprise considering how many inexpensive cars still manage to spec universal-joint axles. There's no impact on driving fun, but the 'bones are a bit of a buzzkill when it comes to the "check out my cool specs" factor.



Like a 1/10 buggy, only bigger. The Raider XL pairs 32-pitch gears with a dual-pad slipper clutch for maximum durability.

We've seen this pistol before. The slight wheel drop and large grip are comfortable, the foam wheel grip is a welcome soft touch compared to a solid plastic wheel, and the 2.4GHz system offers good range. Steering and throttle trims and steering dual-rate controls are under the hatch on top of the radio.



LiPos get all the attention, but good ol' NIMH technology still gets the job done. Arrma's 7-cell pack is higher capacity than typical RTR's with 4600mAh on tap. Bonus points for fat wires and the Deans plug. Arrma includes a charger, but with an output of 600mA, it requires about seven hours to charge the battery.

ALUMINUM & PLASTIC HYBRID CHASSIS

The Raider's defining feature is its chassis, which is essentially an inverted plastic tub. Girder-like aluminum plates sandwich the tub to increase its rigidity and separate front and rear plates support the suspension assemblies, so each can be removed as a complete assembly. The steering servo is fully enclosed by the chassis, but is easily accessed by removing the hatch above it. The chassis' inverted-tub design allows the included 7-cell NiMH battery to be loaded from below via a swing-open door, making pack changes quick and easy with no need to get under the body. Nerf bars and a tubular cockpit frame with aluminum roof panel maintain the Raider's desert-buggy-on-steroids look even with the body panels off, and the cockpit can be easily removed as an assembly for access to the speed control and the o-ring-sealed receiver box beneath it.

The Raider XL looks tough even without its body panels. The cockpit cage can be easily removed for speed control and receiver box access.



Removing a pin lets you flip open the chassis' underside for quick battery changes.

dBoots offers a full line of race treads, but the Raider's dBoots rubber is definitely designed for fun with an all-terrain tread design and firm compound that should offer long wear.



The Raider XL's shocks are "standard bore" at 10mm, a surprise for a big buggy where 12mm or more is common. Steel turnbuckles set front toe-in and rear camber, but you'll need to release the rod end on the upper wishbone to adjust front camber.

FULLY ADJUSTABLE SUSPENSION

The Raider XL rides on a mostly conventional independent suspension, with lower H-arms squeezing plastic oil-filled shocks to smooth the ride. There are some surprises in the details though, including an unusual upper-wishbone design for the front suspension instead of the usual straight camber link. A mix of captured and nutted hingepins is also nice, as it means there are no e-clips to mess with when it's time for maintenance (and you can bet the gang on the Arrma assembly line don't miss them either). The shocks are a surprise; rather than a "big bore" design with 12mm (or larger) bores, the shock bodies are 10mm across, as was common for 1/10 scale cars. The shocks feel well sorted and they'll be fine for the car's fun-running mission, it's just an unusual bit of spec. Unusual in a good way are the shocks' pistons, which are secured by nuts like a proper 1/8 buggy instead of e-clips.

VEHICLE SPECS

Item no.: ARRMA D29
Scale: 1/8
Price: \$359.99
Weight, as tested: 5 lb., 4 oz. (2385g)



CHASSIS
Material: Plastic with aluminum side plates
Type: Inverted tub



SUSPENSION
Type: H-arm with 4.5mm steel turnbuckle camber link
Inboard camber link positions (F/R): 1/1
Outboard upper arm positions (F/R): 1/2
Shock positions, towers (F/R): 1/1
Shock positions, arms (F/R): 2/2

SHOCKS
Bodies: Plastic, 10 mm bore
Shafts: Plated steel, 3mm
Volume compensation: Emulsion

DRIVETRAIN
Type: 2WD
Spur gear/pinion: 87T / 15T
Differential: Sealed bevel steel gear
Driveshafts: Steel dogbone
Bearings: Metal shielded

WHEELS & TIRES
Wheels: One-piece plastic, chrome finish, 12mm hex
Tires: Rubber all-terrain tread
Inserts: open-cell foam

INCLUDED ELECTRONICS
Transmitter/receiver: ARRMA ATX1002.4GHz
Servo: ARRMA ADS-7 metal-gear, waterproof, 97 oz.-in.
Speed control: ARRMA BLX 80-amp waterproof with Deans plugs
Motor: ARRMA BLX 3600Kv 4-Pole
Battery: NIMH 7-Cell 4600mAh 8.4 volt
Charger: Wall type, 600mA

REQUIRES
4 AA batteries for transmitter



BEHIND THE WHEEL

The Raider XL only weighs about a pound more than a 1/10 scale buggy but trims two pounds or more from the heft of a typical 4WD 1/8 scale buggy, so the large car is able to offer very strong performance without requiring a high-output power system or dual batteries like a 4WD e-buggy. Acceleration is strong with the included 7-cell NiMH battery, and the 4-pole motor provides ample torque for on-command wheelies as long as traction is up—otherwise, expect two long stripes of roost. Top speed right out of the box is 37mph, more than enough for any kind of play action. If you want to go even faster, a 3S LiPo and the included 17-tooth pinion will uncork 62mph. The dBoots tires proved to be versatile in all sorts of park conditions, ranging from short grass and the sandy infield of a baseball diamond to chunky dirt and the paved parking lot. The tires' aggressive tread gave good forward traction and side bite for a balanced feel that made the XL easy to drive during hard cornering. Ultimate grip could be improved with softer tires, but the firm dBoots are sure to wear longer. The Raider has good steering feel, and the 97 oz.-in servo has no trouble swinging the tires. It's also a metal-gear servo, always a nice plus in a large car, and waterproof. Suspension performance was good, with sufficient damping action to keep the buggy composed, though we couldn't help but wonder how it might fare with larger shocks. Factory ride height was a low for rough stuff, which lead to chassis scrape. To help out, additional preload spacers were snapped into the shocks to increase ground clearance. The raised right height also helped to cushion hard jump landings. The Raider tended to jump a little nose high off most jumps, but not out of control and nothing hitting the brakes to bring the nose down couldn't fix. After a few hard runs, the motor temperature remained safely under 170°F and the fan-cooled speed control had no trouble keeping up. The included 4600mAh battery averaged about 17 minutes of run time—you may get more or less depending on your driving style.

WATERPROOF BRUSHLESS POWER

The Raider XL includes a 7-cell NiMH battery, but its 80 amp power system is rated for more juice and max's out at 11.1 volts for full 3S-LiPo compatibility. Deans plugs are installed, so there's no need to upgrade to more efficient plugs, and there's a wide variety of batteries ready to plug into the Raider. If you want to dig into tuning, the fan-cooled speed control allows you to select a reverse-lockout mode, as well as adjust drag brake strength, max brake strength, and minimum throttle (or "punch"). The motor is a basic sensorless unit, but nicely constructed and attractive in its machined and red-anodized can. Torque is plentiful since the 3600Kv motor is a 4-pole unit, and the system is waterproof so don't worry about dodging puddles.



Fast, over 60mph on a 3S LiPo

Bottom-access battery allows fast pack changes

High-capacity battery included



Not equipped with big-bore shocks or universal-joint driveshafts



The included 80amp speed control is waterproof and spins a powerful 3600Kv 4-pole brushless motor.

FINAL WORD

Arrma's combination of a big-buggy footprint, plenty of brushless power, and proven 2WD tech scores highly for "something different" fun. While not what you would call cheap, the Raider XL BLX does back up its price with high quality where it counts—namely the metal-gear transmission, waterproof brushless power system, high-torque steering servo, and high-capacity battery. While big-bore shocks and universal-joint driveshafts to replace the dogbones and standard-size shocks would be nice, their omission doesn't hurt the car's fun factor. Get behind the wheel of the Raider XL, and the last thing you'll be thinking about is fatter shocks and what kind of driveshafts are twirling the back tires. This is a good-time car that impresses with size and performance. If you're scoping off-roaders in the \$300-\$400 range, the Raider XL BLX deserves a long look.

SOURCES

ARRMA arrma-rc.com