

## BEHIND THE WHEEL

1/10 SCALE | NITRO | RTR

**Type** » 4WD nitro touring car RTR

**Price** » \$310 (price varies with dealer)

**Top Speed** » 54mph

**Requires** » 12 AA batteries (for radio) » one 6-cell rechargeable NiMH (for RotoStart) » fuel

[hpiracing.com](http://hpiracing.com)

# HPI NITRO RS4 RTR 3 EVO+ 'CUDA AAR



## DRIVE TIME **TEST SPOT** HOME DEPOT PARKING LOT

### MUSCLECARS NEVER HAD IT SO GOOD

With several years of refinement to the RS4 chassis, the HPI 'Cuda handles far better than any real musclecar ever did. Of course, which musclecar ever had the benefits of 4WD and a fully independent suspension at all four corners? Like the original AAR, this car has staggered tire widths—26mm in front and 31mm in back. Not only does this give it a more accurate look, but it also helps neutralize the handling for less experienced drivers. The

Vintage tire compound and tread aren't the grippiest, so the RS4 can be coaxed into amusing sideways action. If you ease it into turns, the prevailing characteristic is a moderate push. If you pitch it in a little harder to get the suspension to transfer some weight and then feed in throttle, you can do some cool powerslides. Jerk the wheel too hard and mat the throttle, and you can force a spin, but you have to work at it. If you crank the steering all the way over and mash the throttle from a stop, you can even get it to do donuts!

Overall, the handling is very confidence-inspiring for beginners. Add in a fairly generous ride height and relatively soft springs around the oil-filled dampers, and you've got a car born for parking lot heroics.

### THERE IS NO REPLACEMENT FOR DISPLACEMENT

HPI respects that time-honored musclecar maxim. In the case of the RS4 Evo+, the "+" represents a significant bump in cubes—the T3.0 is fully 20 percent bigger than the T-15 from the previous Evo, with corresponding increases in power and torque. This engine is based on the burly G3.0 from HPI's racing



## Flexing Some Touring Car Muscle

WORDS MATT BOYD » [mattb@airage.com](mailto:mattb@airage.com) | PHOTOS HOPE MCCALL & PETE HALL

With so many RC vehicles sitting around the *RC Car Action* offices at any given time, folks not directly involved in producing the magazine tend not to notice them all that much. But HPI's latest Nitro RS4 and its muscle-bound '70 Cuda body shell caused more than a few passersby to slow for an appreciative look. One even blurted out, "That thing is badass!" in the middle of the hallway. And these are people who wouldn't look twice at the latest factory team Worlds winner. But that sort of reaction speaks volumes about who HPI is trying to target with this car and how well it has succeeded. RC vets may appreciate the powerful new T3.0 engine, 2-speed tranny and the well-sorted chassis. But this car—decked out in all its vintage muscle Mopar glory—is aimed at car guys, regardless of whether they've driven RC before. What seals the deal for them is the authentic look of the 'Cuda, the Vintage 5-spoke wheels that are dead-ringers for muscle-era Torq-Thrusts and the easy nature of the RotoStart system. It looks the part of a fuel-snorting, engine-wailing, tire-shredding macho musclecar. And the RS4 delivers a driving experience to match—or at least as close as you come in 1/10 scale.

trucks. Here it's slightly detuned to "just" 1.5hp, but that's still a ton of power for an RTR touring car weighing a little over 4 pounds. Consider that HPI's 'Cuda boasts a four times better power-to-weight ratio than the original! No wonder that power comes on strong and pulls hard right up to max speed. I actually found the 'Cuda to be a little too fast for my favorite local parking lot—a nice problem to have. The best part about the engine is the torque; it isn't the least bit peaky. Again, this is ideal for parking lot driving when you want instant on-power delivery for short bursts of speed.

### YEAH, BUT WILL IT DO BURNOUTS?

Absolutely. The T3.0 has enough grunt, and the shaft drive puts the power down quickly, so it's no trouble to light up all four tires on launch. There's no tire smoke a la Mopars of yore, and with all four tires digging away, the 'Cuda hooks up quickly and takes off straight—great for novice wheelmen.

### REIGNING IT IN

'70s Mopars had notoriously dodgy brakes. The HPI 'Cuda is much better outfitted; its single fiberglass disc whoahs the chassis down with authority. In fact, the real limiting factor in stopping power is the tires—the

calipers clamp that disc down so hard that they tend to lock up the tires. The parking lot-friendly suspension loads the front a little more than you might expect; it's no cause for concern, but jam on the binders, and the 'Cuda can swap ends, especially if the asphalt is bumpy or dirty.





This is exactly how the HPI 'Cuda comes: fully painted, trimmed and decaled.

### MORE SCALE MUSCLE

The diecast world has tons of scale musclecars—including 'Cudas and other classic Mopars. For all the news on the best diecast cars and trucks, as well as spectacular features on the full-scale vehicles upon which they are based, check out our sister-publication *Die Cast X!*



### HPI T3.0

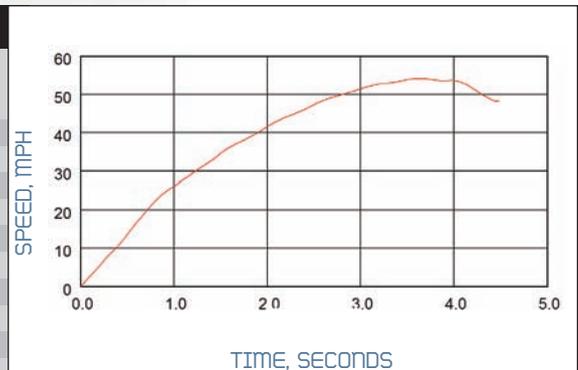
The HPI 'Cuda's engine is based on the G3.0 used in its off-road trucks, and HPI rates the T3.0 at 1.5hp (versus 2.2 for the G). When you factor in the slippery Vintage rubber, green engine and that the 'Cuda body is about as aero-friendly as a barn door, the 'Cuda's impressive 54mph top speed becomes an especially noteworthy achievement. The T3.0's aluminum crankcase bolts straight to the 2.5mm chassis plate, with no separate motor mounts needed. This minimizes weight, and the chassis surface area adds some extra heatsink effect. Helping to keep intake temp in check is a composite carb beneath a high-flow two-stage air filter. The engine needed very little adjustment to get it on song, and it responds predictably to tuning—very handy traits for an RTR.

ENGINE PERFORMANCE

### RADAR TESTING

TOP SPEED **54mph**

- Distance (in feet) traveled in:
- 1 sec. » 20.7
- 2 sec. » 71.3
- 3 sec. » 140.5
- 4 sec. » 218.8
- 0-132 ft. time » 2.9 sec.
- Time to top speed » 3.7 sec.
- Speed at 132 ft. » 50.6 mph



## SPECIFICATIONS

### HPI NITRO RS4 RTR 3 EVO •

**hpiracing.com**

**Scale** 1/10

**Price** \$310

#### DIMENSIONS

**Wheelbase** 10.01 in. (254.5mm)

**Width** 8.27 in. (210mm)

**Weight** 4lb 5.1 oz. (1,958g)

#### CHASSIS

2.5mm aluminum main chassis with radiused sides and a quick-release molded radio tray

#### SUSPENSION

**Type** Lower H-arm with molded upper link

**Inboard camber link positions F/R** 2/2

**Outboard camber link positions F/R** 2/4

**Upper shock positions F/R** 2/2

**Lower shock positions F/R** 2/2

#### SHOCKS

Threaded plastic body with aluminum caps; oil-filled

#### STEERING

**Type** Dual bellcrank

**Servo saver** Servo-mounted spring-type

**Tie rods** One-piece molded

**Ackerman settings** Nonadjustable

#### DRIVETRAIN

**Type** Full-time, shaft-driven 4WD

**Transmission** 2-gear, partially enclosed gearbox

**Slipper clutch** Single-pad with stainless steel pressure plate

**Differentials** Bevel gear with plastic ring gear and sealed plastic housing, steel outdrives

**Spur gears** Molded, 47 and 43 teeth

**Brake** Single fiberglass disc

**Drive shafts** Steel front and rear dogbone center shafts

**Bearings** Metal and rubber-shielded ball

**Gear ratios** primary 2.61:1/1.95:1 (1st/2nd); internal 2.92:1; final 7.63:1/5.69:1 (1st/2nd)

#### ENGINE & ACCESSORIES

**Model** HPI T3.0 3.01cc (.18ci)

**Construction** ABC with machined conrod

**Carburetor** 2-needle rotary, plastic body, 6.5mm bore

**Starter** Shaft-start

**Manifold** Tubular aluminum, bolt-on

**Pipe** Dual-chamber aluminum

**Engine mount** One-piece, direct-mounted to chassis

**Fuel tank** 75cc

#### BODY, WHEELS & TIRES

**Body** HPI 1970 Plymouth AAR 'Cuda, factory painted, decaled and mounted

**Wing** Bolt-on duck tail; optional Lexan wing included

**Wheels** HPI Vintage 5-spoke, multi-piece plastic (0 offset front, 6mm offset rear)

**Tires** HPI Vintage Racing D-compound, 26mm front, 31mm rear; factory mounted

**Inserts** Open-cell foam

#### INCLUDED ELECTRONICS & ACCESSORIES

**Transmitter** TF-1 2-channel pistol-grip

**Receiver** RF-1 27MHz AM

**Steering Servo** SF-1 standard

**Throttle Servo** SF-1 standard

**Receiver battery** Not included

#### ADDITIONAL ACCESSORIES

RotoStart shaft-starter, preload spacers

## UNDER THE HOOD



### 2-speed shaft drive

Shaft-drive delivers full-time 4WD and is unfazed by pebbles and dirt that would wreak havoc with a belt system. A plastic shroud covers the pawl-type 2-speed transmission, which is externally adjustable (but well set from the factory). A single disc brake does a good job of slowing the muscle machine, and the fiberglass rotor should be long-lasting.

**A 2-speed tranny and fiberglass brake help the Evo bust 50mph and get back to zero safely.**

### Easy shift starting

Speaking of convenience, the RotoStart is a dream to use—the torquey hand-held starter pops the T3.0 to life instantly, and the process can be done with the body on, so there's no struggle to keep the engine running while you fumble with body clips. This type of setup is fast becoming the standard with RTR cars and trucks, and rightly so: it eliminates one of the biggest barriers for nitro newcomers.

**The RotoStart is way easier to use than a pain-in-the-butt pull-starter—perfect for nitro novices.**



### Vintage-look rolling stock

HPI really sells the classic muscle look with its Vintage wheels and tires. The rims are good representations of 5-spoke Torq-Thrusts, one of the favorite wheels from the '60s and '70s. The tall sidewalls look authentic but sacrifice a little grip, not such a bad thing when you kick the car sideways in a wicked powerslide. The tread is realistic, too, and check out the cool raised letter markings that spell out HPI

Racing in a distinctively "Firestone-like" script.



**The Torq-Thrust-look wheels and authentic tires give the 'Cuda the proper Vintage look.**

### Sizing up the suspension

The Evo+ uses molded camber links—sturdy, but nonadjustable. The uprights offer several alternate mounting positions for links and shocks, but aside from that, its hands-off in terms of setup—just fine for novices. Oil-filled dampers with aluminum caps look great and help keep the relatively softly sprung suspension planted. It pitches and rolls a bit, but the extra ground clearance—along with a nice thick chassis plate—is perfect for parking lots.



**The suspension emphasizes durability over adjustability. The factory setup is perfect for parking-lot-grade asphalt.**



## The Opposition

The 'Cuda isn't the only classic muscle body HPI makes for the RS4. Ford fans will appreciate the '66 Mustang Fastback shell, which is available (in blue) as an RTR. Chevy guys have to do their own building and painting as this wicked '68 Camaro comes in kit form only. The Chevy and Ford RS4s also include the Vintage 5-spoke wheels, but Trans Am aficionados might want to opt for HPI's awesome Vintage 8-spoke wheels that look just like the racing rims on the Penske/Sunoco race cars that put the Z/28 name on the map. And, of course, all three bodies—'Cuda, Mustang and Camaro—are available separately for you to dress up your favorite 200mm touring car. The super-scale red Mustang and super-scale Camaro SS you see here were painted by ace spray man Bill Zegers at Zegers R/C Graffixx (zegersrcgraffixx.com). Enterprising electric guys could even use a set of HPI's wheel spacers and Vintage wheels with a wide offset to deck out their favorite 190mm nitro-free car.

HPI NITRO RS4 RTR 3 EVO •

**INCLUDED ELECTRONICS & ACCESSORIES**



**HPI TF-1 27MHz radio system**

This 2-channel AM pistol grip is HPI's version of the radio that has become practically the standard for RTRs. It's hardly the luxury model, but it has all the basics—trim dials, dual rates, servo-reversing—in easy-to-find and -use locations. The unpadded wheel has a plasticky feel, but its function is rock-solid. Chances are you've used this radio before, and it is as reliable as it is familiar.

**HPI SF-1 standard servos**

These servos are quite sturdy for standard units and are plenty strong and responsive in the Evo+. The usual knocking around that a parking lot warrior undergoes has not fazed the steering servo at all, and their 50 oz.-in. of torque (give or take) is sufficient for quick steering and effective braking.

**HPI RotoStart shaft-starter**

Use the RotoStart for a day, and you won't be sorry if you never see another pull-starter on a nitro mill for the rest of your life. You have to supply your own standard 6-cell stick pack, but plug that in, attach your glow-starter, press one button and—bang—you're off. It took you more time to read this than it takes to start your engine.

**Basic tools and spare parts**

You get the usual cross wrench, hex wrenches and a turnbuckle wrench. You also get an assortment of spring inserts and replacement suspension parts—all pretty standard fare.

**FACTORY OPTIONS\***

- » Vintage 8-spoke wheels—various item no. for color and width styles
- » Tuning springs—various item nos. for spring rate selection
- » Swaybar set—A209
- » Tuning gear ratios—various item nos. for tooth count selection

\*Partial listing

**YOU'LL NEED | WE USED**

Fuel	O'Donnell R2R odonnellracing.com
Stick pack	Peak Racing PowerMax Pro peakmotors.com
12 AA batteries	Duracell duracell.com



**Body Language**

As one of the most lusted after musclecars of all time, the 'Cuda was an easy pick for HPI. Unusual was the selection of the relatively rare AAR version. The AAR was a one-year-only model produced by Plymouth to qualify the 'Cuda for the Sports Car Club of America's Trans Am series—the one that spawned the Z/28 Camaro and Boss 302 Mustang. The AAR had just one engine—a revvy little 340 with a triple 2-barrel "Six Pack" carb setup. It came with a factory sidepipe exhaust, fiberglass hood, extra-wide tires and a stiffened suspension, making it one of the coolest-looking and best-handling Mopars ever. HPI does a very good job replicating the distinctive long, low and wide shape of the 'Cuda, and it gets the spoiler dead-on. Also excellent are the graphics, with the proper segmented side stripe and great work on the grille. The only things that keeps it from scoring a perfect styling 10 are the blacked-out windows, the air holes and the color of the hood. Original AARs had flat-black hoods (the fiberglass didn't take well to glossy automotive paint), but HPI's has a body-colored hood. Luckily, it's relatively simple to spray your hood black—since it's a flat color, spraying the exterior looks perfectly accurate.



**ON THE BENCH**

There's fairly little to do in terms of setup on the Evo+ 'Cuda as it's meant to be a turnkey package. Even the body is done for you, unless you want to paint and add the supplied touring car wing. (And why in the world would you—the bricklike 'Cuda is hardly a racer.) All the camber links and tie-rods are fixed-length, molded pieces, so there isn't much to do to the suspension. You can play with the inserts to adjust the spring rates slightly, but beyond that, the 'Cuda is ready to rumble right out of the box.

**NEEDLE ADJUSTMENT**

HPI sets the needle positions at the factory for break-in. After you've babied it through two or three tanks, it's time to turn up the wick a bit. The low-speed and idle settings can stay the same for most users, but the manual specifies between 1/4 and 3/4 turn in (clockwise) on the high-speed needle, and this proved correct for my car. I chose to run the 'Cuda slightly on the rich side—with the body, tires and springs this car comes with, cooking the engine for a couple of extra mph just doesn't make sense.

**BRAKE ADJUSTMENT**

About the only other thing you can fuss with on the Evo+ as delivered is the brake strength. To begin with, zero out the throttle trim on the radio so you'll start with a good baseline. Then tighten the knob on the end of the brake rod to add more brake force. Try to dial it in for a gradual brake feel. Anything more than that won't add stopping power, it will just make the binders harder to modulate. Also remember that if you switch to stickier tires, you will probably want to dial in some more brake.

**SWITCH LOCATION**

The side-mounted on-off switch tends to collect road grit tossed up from the front tire, and located as it is almost dead-center between the wheels, it's fairly susceptible to a side impact. The best solution is to relocate the whole thing, but short of that, at least put a piece of tape over the switch to protect it from dirt and minimize the risk of a side-on hit that inadvertently shuts down your radio system while the car is running.

**Rating the HPI Nitro RS4 RTR 3 Evo+**

The Evo+ is just about the best recruitment tool I can think of to draw newcomers into RC. The body, wheels and tires offer as much visual excitement as you will find in an RTR—guaranteed to draw the eye of any true car guy. The RotoStart is perfect for newbies, too: it blasts right through the difficulty barrier for novices and nitro. The RS4 chassis has been around for a while, but a steady stream of updates have kept it up to date. In Evo+ guise, with the burly new T3.0 engine and the Vintage wheel and tire combo, it is a formidable parking lot warrior. Its rugged drivetrain and forgiving suspension capably handle less than pristine pavement without worry, and the copious amounts of torque mean proper musclecar powerslides are only a jab of the throttle away. HPI really hit on something: the car drives well, looks great and plays to the rabid following that classic musclecars enjoy in the broader auto-enthusiast world. A great way to bring fresh blood to the touring car market! **🔥**



- » Outstanding visual impact
- » RotoStart simplicity
- » Truly ready-to-run, right down to the decals
- » Power, tires and suspension make for sideways fun



- » Hood should be black
- » Solid windows and air holes detract from styling

**BEST FOR**

Classic musclecar fans of any skill level