

AT A GLANCE

WHO MAKES IT: Helion
WHO IT'S FOR: Beginners
PART NUMBER: HLNA0301
HOW MUCH: \$189.99
BUILD TYPE: RTR



★★★★★ **REVIEWER'S OPINION**



Like all previous releases from Helion, the Criterion looks like it will be a massive hit that people will love. Right out of the box it is faster than almost any other 2WD off-road buggy. And while it is fast, it is still plenty durable and performs quite well. Better yet, the price point is out of this world considering all you get.

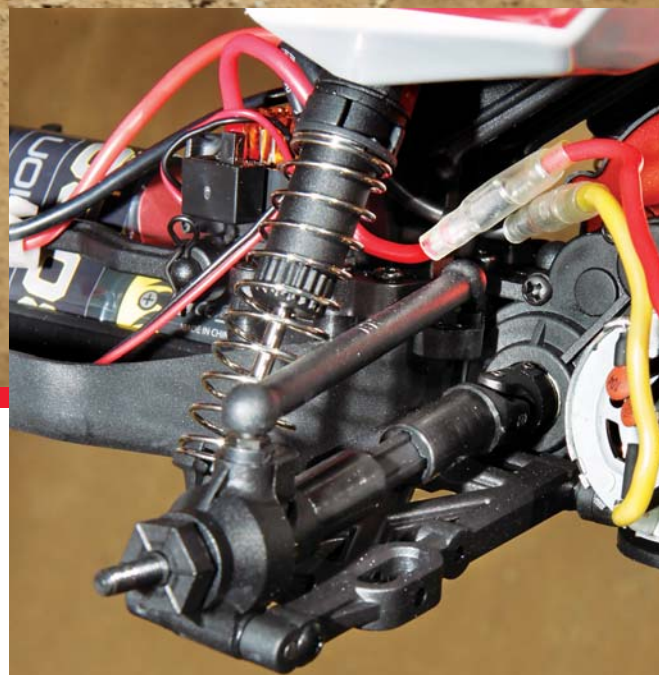
Helion, distributed exclusively by HobbyTown USA, made some serious waves when they entered the radio control scene and released the well-priced Dominus 10SC 4WD short course truck. These waves have gotten progressively bigger with each vehicle, including the brushless powered Dominus 10TR and the Invictus 10MT. For their fourth 1/10-scale off-road release, Helion wanted to shake things up, so they have come up with something completely different, a 2WD off-road buggy they named the Criterion. Helion has yet again served notice to the rest of the industry that everyone else needs to step up their game as this just might be the most capable RTR off-road buggy on the block for the price.

Brute force budget buggy!

HELION
CRITERION



The heavy duty arms stretch out to the bulky rear hub carriers. The carrier has a larger inner bearing that also supports the axle where it pins to the universal drive yoke. The slider shafts are a floating center section to lessen binding and wear to the drivetrain.



Behind the *Wheel*

Decisions, decisions. The Criterion is a machine that could be a lot of fun in the backyard or it can pump out some intense action on the track, so I tested the buggy at both ends of the spectrum. Up first was some running in my neighborhood. There is a wooded area with low grass and dirt trails that proved a great first test ground.

With a full charge on the pack, I punched the trigger and watched the Criterion churn up the dirt and shoot down a dirt path. The buggy instantly made me grin with the speed it was pumping, much more than what I was expecting from a buggy at this price point. On the trail it gained enough speed that the buggy launched off of a few mounds, landed on all fours and kept going. A quick spin around and I punched the throttle again and shot the buggy towards me. Going over the mounds on the trail was different coming back; the first one I hit sent the Criterion flipping end-over-end before finding a final resting place in the grass on its roof. I guess I should have checked out the trail scene first, but when I went to flip over the buggy it was fine. Ok, it's fast and seems to be rugged, but how rugged. I moved out of my racing mindset of keeping total control of the car and just went all out. Roots, rocks, piles of dirt, I punched the Criterion's throttle and popped off anything that resembled a jump. There were lots of tumbles and hits, but no broken parts. I was having a lot of fun and not worrying about the abuse the buggy was taking. But I wanted to see what else the Criterion had to offer, so I went to the track.

On a groomed race track, the tires hooked up pretty well. The squared-off tire



had a good contact patch to grab traction and allow the buggy to accelerate rapidly on the straightaway. Going into the turn, the buggy had some push even though the steering felt quick and responsive. To round some of the tighter corners, I hit the brake with just a light tap to spin the rear around. The Criterion was really handling the track well in stock form. Over the jumps, the buggy sailed through the air flat and landed easily. Through the really bumpy parts of the track, the rear end did buck around, but I just rolled off the throttle a bit on the following laps. My track testing wasn't all fast laps and precision driving; the Criterion did receive some durability testing here, too. A few pipes got a taste of full throttle Criterion and a number of tumbles off of jumps finally put a few cracks in the wing, but in the end, the buggy lived to run another day without a trip to HobbyTown USA for repair parts.

Under the radar gun, the Helion Criterion popped off a 35.1mph its first pass on a freshly peaked pack. A number of runs after were in the consistent 34mph range before it settled off into consistent 32-33mph runs. This buggy in absolute bone stock form is fast!

Facts

◆ The backbone of the Criterion is the durable three-piece composite chassis. Utilizing a standard tub type design, the chassis is light and tough. It is designed in such a way that in a hard collision it is more likely to flex and return to shape than break. This is great for beginners who are getting their first taste of 2WD off-road buggy action. Additionally, a little chassis flex often is a good way to increase traction. The chassis also has a unique battery strap that accommodates the hump-style 7-cell battery pack. Twist-style thumb screws hold it in place and since they stay put, they won't get lost like body clips.

◆ All four corners of the Criterion feature tough, composite long-throw suspension arms. They are plenty beefy to absorb an abnormal amount of abuse and have multiple mounting positions for the shocks. Speaking of the shocks, they are super smooth and feature plastic bodies and internal bladders. Pre-load clips are used to set ride height and increase spring tension.

◆ A waterproof servo connects to a dual bellcrank to push the front tires from side to side. The bellcrank works exceptionally well, rides on friction free ball bearings and incorporates a servo saver to protect the servo gears from damage should the buggy end up in a front end collision. Durable static plastic turnbuckles attach to the bellcrank and the carrier-style steering knuckles found at the C-hubs.

◆ Helion made the drivetrain on the Criterion as worry-free as possible. For starters, it features a metal gear planetary-type differential. Planetary differentials are virtually maintenance free and are exceptionally efficient. To protect the entire drivetrain and help smooth out acceleration, an adjustable dual friction slipper clutch is also used.

◆ The Criterion utilizes the HRS-3.1 advanced 2.4GHz radio system for precise control. The HRS-3.1 offers plenty of adjustments including EPA, dual rate, digital trims and servo reversing. The receiver is kept well-protected from the elements in a watertight radio box. There is also a Metric 30A brushed speed control under the hood of the Criterion. It, too, is waterproof, has linear throttle and brake responses and is even LiPo battery compatible. To get the wheels spinning, a 12-turn 540-size Metric motor is used. This motor has plenty of pop and helps the Criterion hit 30-plus mph!

◆ There are two well-detailed color schemes for the Criterion, blue and red. The high down-force is easily adjusted to make quick angle changes a breeze. Long wear tires found on all four corners are mounted on white rims. The rims feature a 12mm hex adapter that is the industry norm and is compatible with rims designed for Team Associated and Kyosho vehicles. This means finding aftermarket tires and rims should be very easy.



A dual pad slipper dampens the shock to the drivetrain. An aluminum motor plate helps dissipate heat from the motor as the buggy is geared to reach speeds over 30mph.

ITEMS NEEDED

- ◆ 4 "AA" batteries for the transmitter

ITEMS USED

- ◆ Max Amps "AA" batteries
- ◆ Radiant Ascend charger

SPECS & TUNING OPTIONS

DIMENSIONS

LENGTH: 15.21 in. (386.4mm)
WIDTH: 9.80 in. (249mm)
WHEELBASE: 11.14 in. (283mm)
WEIGHT: 3.44lbs (1560g)

BODY, WHEELS AND TIRES

BODY: Pre-painted polycarbonate
WHEELS: White plastic
WHEEL ADAPTER TYPE: 12mm hex
TIRES: Long wear rubber tires

SUSPENSION

TYPE: 4-wheel independent
SHOCK POSITIONS: (F) 3-tower, 2-arm, (R) 4-tower, 2-arm
CAMBER: Fixed
ROLL: Fixed
WHEELBASE: Fixed
RIDE HEIGHT: Pre-load clips on the shocks
MISC: NA

STEERING

TYPE: Dual bellcrank
TOE: Fixed

CHASSIS

TYPE: Tub
MATERIAL: Composite plastic
THICKNESS: NA

DRIVETRAIN

TYPE: 2WD
TRANSMISSION: 3-gear rear-mounted
DIFFERENTIAL: Planetary gear differential
CLUTCH TYPE: Adjustable slipper
GEAR RATIO: Optional pinion gears
BEARINGS: Full set of shielded



HELION CRITERION



The front suspension components are slightly flexible to absorb crash impacts. The oil-filled shocks are smooth and bind free. Plastic one-piece camber links and toe-links are fixed so there are no setup worries for the entry level racer.



Two twist clips unlock the battery plate for easy battery removal.

PROS

- ◆ Very quick right out of the box
- ◆ Water-resistant electronics package
- ◆ Comes with a 7-cell NiMH battery pack
- ◆ Great RTR tires
- ◆ Near bulletproof planetary gear differential

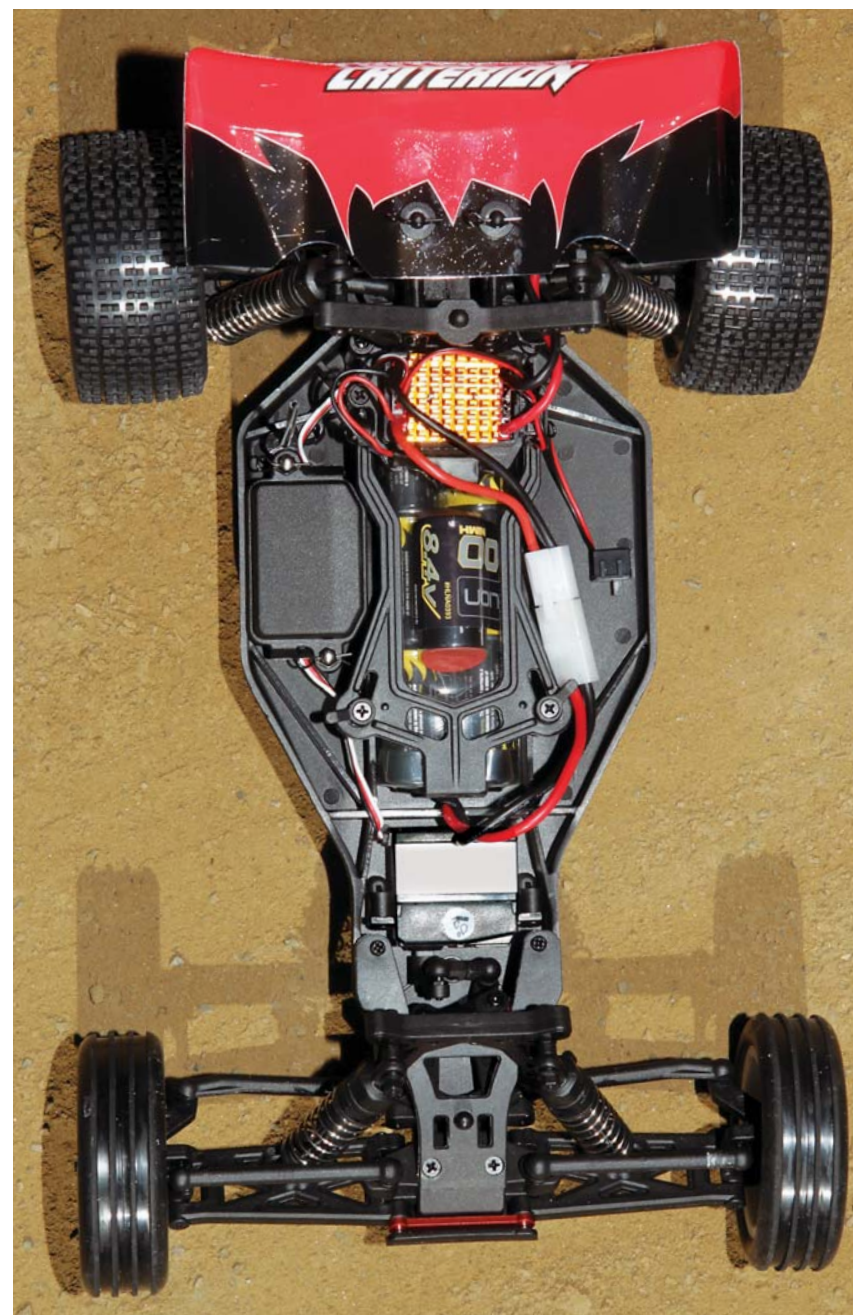
CONS

- ◆ I'm not a fan of fixed turnbuckles

HOP UPS WE RECOMMEND

◆ Radiant Reaktor 3500Kv Brushless Motor Combo, RDNA0023, \$99.99 – If you want to go faster this is the ideal hop-up. The brushless Radiant Reaktor system will not only increase top speed, it is also uber efficient so it will boost runtime, too.

◆ Radiant Ascend Multi-Chemistry Charger, RDNA0002, \$40 – The included charger does a good job but the Ascend has an adjustable charge rate so you can charge at more than 1-amp. With less charge time, you can spend more time having fun. Additionally, it is multi-chemistry so should you decide to get a LiPo battery pack this charger will be all you need.



WRAP UP

While the Helion brand is relatively new, the people behind the scenes have been working in the industry for many, many years. This shows in the Criterion as it clearly hits the mark as a potent entry-level RTR buggy. For under \$200, there is not much that can compare to its speed, performance and durability. I am quite sure that Helion will be releasing a few hop-ups for this already capable buggy in the near future, pushing performance to the next level. In the meantime, if you, or someone you know, is looking to get their first vehicle and thinking about a buggy, head right on down to your closest HobbyTown USA and grab a Criterion before the shelves are empty. ☺

Links

[Helion helionrc.com](http://helionrc.com)

[HobbyTown USA hobbytownusa.com](http://hobbytownusa.com)

[Radiant radiantrc.com](http://radiantrc.com)

For more information, please see our source guide on page 129.