

**1/8 NITRO
BUGGY**

CEN Matrix R2

Big-block buggy mayhem



Anyone who has been in the hobby for some time might be surprised by how quickly CEN seems to have come out of nowhere and produced cars that win at the highest levels, particularly in the crowded 1/8 field. Many RC racers now have their eyes on CEN and are eagerly awaiting the latest race-roller, but we sport guys got our grubby mitts on CEN's new RTR sport kit first. The Matrix R2 buggy also has a lot of race-quality features such as a lightened drivetrain and chassis. Interested? Read on; it gets better.

**AT A
GLANCE**

WHO MAKES IT
CEN Racing

WHO IT'S FOR
Everyone

HOW FAST
34.17mph

HOW MUCH
\$299

WHAT WE LIKED

- Race-quality features in an RTR
- Oversize engine; it runs strongly and reliably
- Price; excellent
- Radio; it's a nice FM unit
- Metal-gear servos; they're strong

WHAT COULD BE IMPROVED

- No turnbuckles; they would make adjustments easier
- Chassis brace; it broke

YOU'LL ALSO NEED

- 8 AA and 4 AAA batteries
- Fuel
- Glow-plug igniter

WE USED

- O'Donnell Racing 20%-nitro fuel

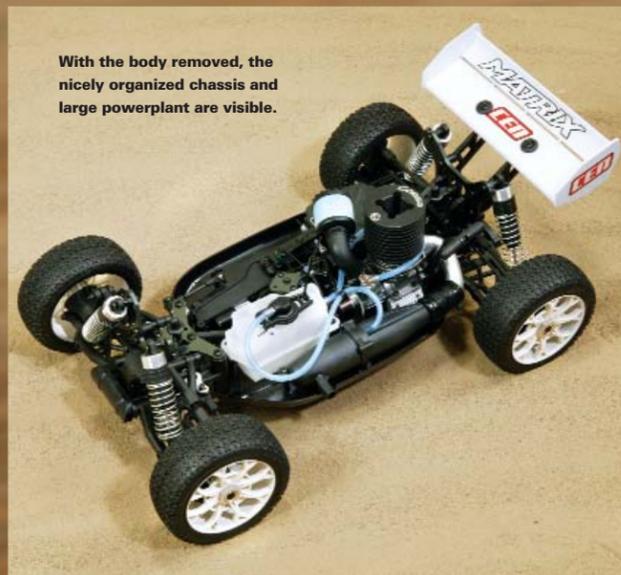
THE BOTTOM LINE

Whether you're looking to bash with friends or start racing, this car has the features you need, and it's easy on your pockets.

FAST TRACK CEN MATRIX R2

WHAT YOU NEED TO KNOW

- The entire drivetrain has been lightened and hardened—the drive shafts, outdrives and differentials. The car will feel more responsive to inputs, and this can help handling, too. The new diffs are smaller and lighter and feature a cross-pin design; they will help keep the hardened-steel bevel gears aligned.
- The suspension has big-bore plastic-body shocks, new shock towers, new upper links and suspension arms that are the same front to back and side to side, so you minimize spares in your parts box. Also noteworthy: no E-clips! The suspension feels plush and contributes greatly to the car's outstanding handling.
- The included engine is the massive Corsa .30. Is that overkill? Yes, sir; it is. But I'm not complaining! While we wait for CEN to finish developing its new line of Corsa engines, we get to enjoy the same beast from the GSR in the new buggy. I consider this a bonus; it's fast and reliable.
- The Sanwa MX-Sport FM transmitter is superb for an RTR radio. With features such as 10-model memory, endpoint adjustments, steering dual rate and exponentials, it has everything you need to get started with FM reliability. It is a big bonus for people who are just starting out.
- The R2's body has angular, stealthy lines that I really like. I like blob paint schemes, and I think this one looks good, but I would have preferred something that accents these new lines more.



With the body removed, the nicely organized chassis and large powerplant are visible.



The cast-aluminum steering blocks look strong enough to endure any mishaps. The linkages are adjustable (but they aren't turnbuckles!).



The center diff is supported by an aluminum brace. The hardened-steel spur has beveled teeth, and the phenolic brake discs are excellent.



The rear suspension uses the same arms as the front and is flipped side to side. This minimizes the need for a bunch of different spares. The plastic-body shocks are very smooth and do a great job of absorbing jumps and bumps.



The radio gear is tucked away in a box with a rubber boot over the on/off switch. A one-piece plastic radio tray holds the high-torque metal-gear servos that function superbly.



A composite tuned pipe expels the exhaust. I think that the 125cc fuel tank might have been a bit small for the large engine, which drank the fuel rather quickly.

PERFORMANCE

On the day I was ready to test the R2, the weather suddenly became wet and cold, and no nitro car likes that. I decided to test it around my home before taking it outside. The big-block engine fired up with just a couple of tugs; it is loud and sounds angry. It's larger, and that gives it a raspy sound that reminds me of a dirt bike. Outdoors, on a dilapidated parking lot, I immediately felt its extra power. It was nowhere near topped out, and the speed was impressive. On the high-bite surface, the car had a slight push but was very responsive. I let off the throttle to bring it around and decided to wrap it up and take it out in the dirt the next day.

Fortunately, the weather cleared up for my dirt outing. The car ran great. I slowly eased into the throttle, and at about 50 feet, I'd be at about $\frac{3}{4}$ throttle with the engine screaming. I nailed full throttle, and it still had more to give; the car sent up large dust roost that I could easily see from a distance. The cushy suspension soaked up the surface

imperfections and kept the car driving smoothly. The engine's extra power had to be handled carefully, but the suspension reeled the car back in with very little input from me. Kids yelled for me to do donuts, but it didn't want to do them; it tracks straight. I had to stab the brakes hard to get the rear end around; they work well but will lock it up if you need them to. I might dial them out a bit. This car loves to jump; it flies low and level, and is very responsive to inputs. I even hit steeper parts of the hill, but nothing unsettled its flight pattern. I'd really like to get this car to a track; maybe that would make a good "Replay."



How are the Matrix C-1 & R-2 different?

CEN wants customers to know that the C-1 will still be available alongside the R-2 and that there are big differences between the two. The R-2 has revised suspension components such as newer upper arms and composite cylinder big-bore shocks; the C-1 has bulky, heavier upper arms and aluminum shocks. The C-1's aluminum radio plate and cast chassis braces have been replaced on the R-2 by similarly shaped composite plastic units. In the drivetrain, the C-1 has four steel brake discs and multi-piece diffs; the R-2 has one-piece diff cups and fiberglass brake discs. The C-1 has an aluminum tuned pipe, a splashguard and a large filter; on the R-2, this has been changed. Overall, it's true to say that CEN trimmed the R-2 so that RTR buyers would be able to have a great machine without a huge price tag.

FAST TRACK CEN MATRIX R2



RADAR DATA

ACCELERATION



THE LAST WORD

CEN has spent hours at the track figuring out what works, and the Matrix R2 clearly shows that. Its handling is superb. The power from the large .30 engine is over the top and a lot of fun; it fires up easily and runs very reliably—a big bonus for beginners. The FM radio is really nice, and the high-torque servos are excellent. And you get all this at a price that makes it an outrageously good deal. It's perfect for those who want to get their start with a big, bad, 1/8-scale buggy. ●

LINKS

CEN Racing, cenracing.com

For more information, please see our source guide on page 153.

THE SPECIFICS

CHASSIS

LENGTH 19.09 in. (485mm)

WIDTH 12 in. (305mm)

WHEELBASE 5.9 in. (150mm)

WEIGHT 112 oz. (3,181g)

MATERIAL Anodized-aluminum

TYPE Lower plate w/one-piece radio tray & lighter braces

The chassis isn't cluttered and keeps everything close to the center. It has plastic braces and a plastic radio tray, but the center diff support is aluminum.

SUSPENSION

TYPE Independent double-wishbone

SHOCKS Plastic oil-filled

WHEELS Lightweight plastic spokes

TIRES Xs & bars

MATERIAL Molded plastic

The new, plastic, big-bore shocks are surprisingly smooth and do a great job of soaking up the bumps. The tires hooked up well on most surfaces, but most of my testing was done on loose dirt, and they kicked up a lot of roost.

DRIVETRAIN

TYPE 4WD

DIFFERENTIALS Fluid-filled gear diffs (front, center & rear)

BEARINGS Metal-shielded ball-bearings

BRAKES Phenolic fiber disc, steel pads

DRIVESHAFTS (F/R) Universal-joints/dogbones

The drivetrain is lighter throughout, and hardened, too, so it is very light and durable. It didn't have any problems handling the torque from the large engine. The diff oil felt about right, as the car felt planted and didn't show any signs of unloading.

POWER PACKAGE

TYPE Corsa .30cc nitro

CARB Slide valve low- & high-speed needle adjustments

EXHAUST Composite tuned pipe w/aluminum header

CLUTCH 3-shoe, aluminum flywheel

The Corsa .30 is a monster that might be more suited to the monster truck it was designed for, but it's a load of fun in this buggy. I didn't note any instability caused by its extra weight, and I don't think anyone will be complaining.