

TEST DRIVE

CEN RACING MATRIX 5MT

■ RTR ■ GAS ■ OFF-ROAD

THIS GIANT-SCALE MONSTER HITS HARD!

WORDS MARK RONGE

PHOTOS HOPE MCCALL

You can never really have too many 1/5-scale rigs on the market. Their realistic noise, attractive run times, cheap fuel and sheer size of these vehicles attract a sizable group of RC'ers. CEN Racing is making a huge crash into the market with its Matrix 5 series of gassers. A buggy, truggy and monster truck are available, and they all share the identical chassis. In this review, I look at the monster truck version, with large wheels and tires and a proper MT Lexan shell. The Matrix features everything a diehard driver would want in a large-scale car: 4-wheel-drive, huge 30cc engine, 4-wheel-drive, strong servos, and did I mention 4-wheel-drive? Let's take an in-depth look at everything the Matrix 5MT offers.

SPECIFICATIONS

Type 1/5-scale RTR 4WD gas monster truck

Price \$900

Top speed 32mph

Wheelbase 20.5in/520mm

Width 17.7in/450mm

Weight, as tested 33 lb./15kg

Clutchbell/Spur gear 24/39

Final drive ratio 7.68:1

Chassis 4mm T6 aluminum plate

Differential planetary grease-filled

Suspension lower arm with adjustable upper link

Shocks Threaded aluminum body

I POWERED OVER HUGE DIRT MOUNDS AND GIGANTIC HILLS, AND I WAS EVEN ABLE TO POWER-SLIDE ON LOOSER SOIL



 FOR VIDEO OF THE CEN MATRIX 5MT, GO TO RCCARACTION.COM/CENMATRIX5MT





A LARGE AIR-COOLED 30CC 2-STROKE GAS-BURNING ENGINE IS INCLUDED WITH THE MATRIX 5MT, AND IT'S LARGER THAN MOST 1/5-SCALE VEHICLES ON THE MARKET TODAY



FEATURES

CHASSIS. The chassis is composed of 4mm-thick anodized T6 aluminum plate. It's a single-deck design, much like current 1/8-scale racing platforms. And even though this is a large monster truck, CEN does an excellent job of placing the parts low to the ground to obtain a low center of gravity, which will result in fewer rollovers and overall better cornering. To provide a stronger platform, there

is a beefy anodized aluminum roll cage to protect all the components. The only thing left exposed if you land upside down are the shock towers, and even then it would be hard to break them. The radio box is huge and accommodates large sub-C-type battery packs if you don't use the included AA battery setup. To get into the radio box, you must remove five screws, one of which is inaccessible when the roll cage is in place. Luckily, the roll cage can be swung open by simply

removing two body clips. This is a very clever design that will be beneficial not only at home for quicker maintenance, but also in the field to make minor repairs after a hard bashing session. The large front bumper will protect the front suspension from nasty crashes, but the bumper is a bit close to the front shock tower compared with similar models.

SUSPENSION & STEERING.

The first thing I noticed when I took the Matrix 5MT out of the

box was its adjustability options; you can tune every aspect of this double-wishbone suspension without the use of aftermarket parts. The rear toe is fully adjustable due to the rear A-arm design; out of the box it comes with slight toe-in. The camber is adjustable all around, and you can dial in anywhere between zero to 6 degrees of caster. Both shock towers are molded out of plastic, but two towers are joined together for front and rear, for a total of four towers.

The Matrix 5MT comes in an RTR package that includes an FM computer radio. The radio features an easy-to-read LCD screen and can be used with other vehicles, as it has a 10-model memory and plenty of features such as adjustable endpoints, dual steering rates, anti-lock braking and even exponential. The Matrix MT includes a large-scale servo, capable of putting out an impressive 260 oz.-in. of torque for steering. This proved to be ample power to turn the large monster truck wheels, and the other variations of the Matrix 5 will provide an even faster steering rate owing to their smaller tires. A standard high-torque servo is used to open the carb and apply the brakes.

PLUS/MINUS



- » 4-wheel-drive traction
- » Huge 30cc engine
- » Tons of ground clearance



- » Center bevel gear is exposed
- » Soft setting on servo-saver

VERDICT

This is hands-down one of the most durable 1/8-scale trucks I've ever seen. It's the perfect speed for bashing, has tons of low-end torque with the 30cc engine and a decent top end capable of 30mph+. This 4WD truck is perfect for a newbie to gas-powered vehicles, and veterans alike will appreciate many of the features. Check out the video at rccaraction.com to see the beating we gave the truck and how the 4WD tackles some of the toughest obstacles we could find!

SOURCES

CEN Racing cenracing.com
Maxamps.com maxamps.com

PERFORMANCE

It took only a few pulls on the pull-start to fire up the engine in the Matrix 5MT, and the carb settings were on the money out of the box. The engine idled perfectly during warmup and seemed to have good response when I got on the throttle. Just driving around slowly, it's obvious the engine has tons of low-end grunt, and the truck looks great as the suspension compresses during acceleration. The truck bogs a bit when you punch the throttle, but once the rpm come up, it screams. I was very impressed with the stock power, and I'm confident this would be enough power for many users and seems to be more than enough for a 33-pound monster truck. As expected, the truck has inherent on-power push, and if one of the tires lost traction, it would diff out. Other than that, the drivetrain on this truck performed perfectly. I powered over huge dirt mounds and gigantic hills, and I was even able to power-slide on looser soil. The drivetrain never skipped a beat; however, the exposed center bevel gear did attract some debris, but it didn't cause any breakage or wear after a few runs in the stock form. The truck's suspension handles rough terrain and moderate jumps with ease. The huge 8-inch tires provided tons of clearance between the chassis and ground, and I literally plowed through the bashing field faster than with almost every truck I own.. The Matrix 5MT usually flew through the air with its nose down, and I was able to change my driving style accordingly to correct this. It did respond to in-air inputs better than the 2WD 1/8-scale truck I've seen. I was able to goose the throttle before landing to help bring the nose up. After countless runs, I had a better feel for the vehicle and was able to get around faster and with more finesse. The steering servo seems adequate for the large tires, but in some situations, it struggles to turn the wheels because of a loose servo-saver setting. The large metal gears did not skip a beat even when I tightened the servo-saver down for a better steering response. From the truck's top speed (32mph by radar), the servo was capable of locking up the tires on any surface. On the asphalt, the truck screeched to a halt in mere feet, something that is incredibly impressive with a stock throttle/brake servo. No one who buys this truck will have to replace the stock throttle servo, and I even toned it down a bit by setting the endpoints on the Skyion radio system so it didn't have as much throw.



The result is a super strong setup that allows for some give and fewer broken parts in nasty crashes. The large threaded aluminum shocks are easily adjustable and should prove very durable. The 5MT uses a conventional bellcrank- steering setup, in which the servo-saver can be adjusted without removing any components. All of the links are solid and appear to be very durable, and an aluminum top plate covers all the internal steering components and in-

creases chassis stiffness.

DRIVETRAIN. The gears in the transmission are protected by a molded-plastic cover that will keep dirt out when running in different terrains. The gears are made of a composite material and the pitch is fairly large, so even with heavy abuse they'll hold up. The last gear in the stack transfers power to a set of center-mounted bevel gears which turns the center driveshafts. Connected to those

driveshafts are front and rear differentials, and inside the diffs is a set of planetary gears that come packed with grease. Beefy universal driveshafts smoothly send power to the front wheels, while the rear transmission contains dogbones.

ENGINE AND ACCESSORIES. A large air-cooled 30cc 2-stroke gas-burning engine is included with the Matrix 5MT, and it's larger than most 1/8-scale vehicles on the market today.

The air and fuel are mixed in a Walbro carburetor that features high- and low-end as well as idle adjustments. The carb also features a choke for cold starts, and a primer bulb brings up fuel from the tank. The fuel tank holds up to 650cc of 2-stroke mix, and CEN includes an extra bottle with measurements on the side to aid in the proper mix of gas and 2-stroke oil. Fill it with gas up to a specific line, then add oil to the next specified line, close the cap, and mix.