EXCLUSIVE!

TRAXXAS

JUMP, CRAWL AND TEAR UP THE TRACK

WORDS BRANDON WILCOX **PHOTOS** HOPE McCALL

QUICK SPECS

Scale: 1/10
Price: $515 (varies with dealer)
Top Speed: 20mph
Web: traxxas.com

HIGHLIGHTS

- Versatility—crawl with it, bash it, and set it up for racing
- Fully waterproof
- Comes with lights
- Very durable
- Remote-locking diffs
- 2-speed transmission

ONCE AGAIN TRAXXAS COMES OUT SWINGING.

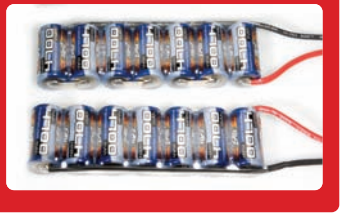
This time it's an all-terrain monster truck that's fully loaded. Capable of racing, rock crawling and bashing, this new truck doesn't just sit with the current line of trucks on the market but is a new breed of monster. Based on the proven E-Revo platform, the truck adds new features, which include innovative remote locking differentials that can be locked and unlocked from the transmitter, a high-low range transmission, fully waterproof electronics and a 10 LED lighting system. That is just the beginning; follow along as we show you what really makes this monster stand out.

SUMMIT

WITH THIS ALL-TERRAIN VEHICLE

TEST GEAR

- 8 Duracell AA batteries
  duracell.com
- Dual MaxAmps.com 6- and 7-cell 4700mAh batteries
  maxamps.com
- Onyx 230 AC/DC charger
  duratrax.com

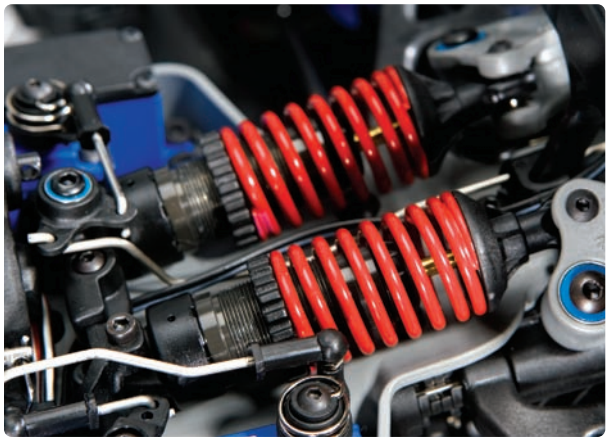


WATERPROOF ELECTRONICS

When I see a vehicle marketed as "all terrain," I want to test it in snow, mud, sand and water. Like the latest E-Maxx, E-Revo, and Slash models, the Traxxas Summit comes with a total waterproof electronics package. The speed control is an EVX-2 that is 100% fully waterproof. The receiver sits inside a watertight receiver box. It is sealed by a rubber gasket, and where the wires exit the box, they are pressed against a piece of foam and covered with grease—this system works very well. All the steering and shifting servos are also fully waterproof and are molded in blue, so you can tell them apart from the unsealed versions.

THE TRAXXAS SUMMIT
EXCELS IN A VARIETY OF DIFFERENT TERRAIN

THE LIGHTS ARE ON The Summit comes standard with a 10 LED lighting system, so the running doesn't have to stop at dusk. The lights are always on and get power from a spare channel on the receiver. There are four bright white LEDs in the front of the truck's bumper and six red LEDs in the rear bumper. The bumpers are mounted on the chassis, so when you take the body off, you don't have to disconnect the lights.



REVO-STYLE SUSPENSION The Summit uses the proven Revo-style suspension system for its off-road duties. It's a sealed pivot-ball design and uses long-travel progressive rockers. The suspension works great on the track and really soaks up the ruts off-road. When approaching an obstacle, the high-riding suspension offers greater ground clearance than a solid axle monster truck. Even at full articulation, the Summit's diffs do not hang lower than the wheel hubs, so the Summit does not give up any ground clearance to a solid axle design.

ALL-TERRAIN RUBBER Tires can make or break a vehicle, and Traxxas decided to engineer some new rubber for this project. The Summit comes equipped with Geode wheels and Canyon AT tires. The new rubber is soft, and the tread pattern is aggressive. The tires are 7 inches tall and come pre-glued with soft foam inserts. The Geode wheels are bead-lock style, and although the tires are glued to the rims, the bead-lock helps support the sidewall of the tire. The hexes are heavy-duty 17mm aluminum units and use Traxxas' splined design, so there will be no slippage.

HEAVY-DUTY DRIVESHAFTS High-traction tires, a powerful 775 motor and locked differentials can all wreak havoc on a drivetrain. Fortunately, Traxxas is on top of things and upgraded its Revo-spec driveshafts to use a CV-style joint on both ends. The joints are supported by the full diameter of the shaft and are super smooth.

SPECIFICATIONS

DIMENSIONS
Length Overall 22.1 in. (563mm)
Wheelbase 12.6 in. (377mm)
Width 18.6 in. (472mm)
Weight as tested 12.8 lb. (5,806g)

CHASSIS
Type Composite plastic monocoque with integrated battery compartments

SUSPENSION
Type Pivot ball with rocker-actuated inboard shocks, 5mm steel pushrods and long-travel rockers
Total travel 120mm
Upper arm positions (inboard/outboard) 1/1

SHOCKS
Type Oil-filled coil-over, threaded, hard-anodized, Teflon-coated aluminum body with titanium-nitride shock shaft

STEERING
Type Dual servo, single bellcrank
Servo-saver Integrated cam-type
Tie rods 5mm steel turnbuckle
Ackerman settings (inboard/outboard) 1/1

DRIVETRAIN
Type Full-time 4WD, shaft-driven
Transmission Sealed gearbox with user-selectable high- and low-range gear ratios
Differentials Sealed, silicone-filled bevel gear with T-Lock remote-locking system
Spur gear 68T plastic, 32-pitch
Pinion 14T hardened steel
Driveshafts Telescoping plastic with true curvilinear splines and CV joints
Bearings Rubber-sealed ball bearing
Final drive ratios 70.18:1 (low), 25.34:1 (high)

BODY, WHEELS & TIRES
Body Summit .040 polycarbonate with bolt-on plastic ExoCage
Wheels Geode 6-spoke with bolt-on bead-lock-style trim ring
Tires Canyon AT soft-compound rubber
Inserts Extra-soft foam donut

INCLUDED ELECTRONICS & ACCESSORIES
Transmitter Traxxas TQ4 27MHz 4-channel
Receiver Traxxas 2216 micro 4-channel
Steering servos 2075 waterproof digital (two)
Shifting servos 2065 waterproof digital (three)
Speed control Traxxas EVX-2 16.8V waterproof
Motor Traxxas Titan 775

ELECTRONICS & ACCESSORIES

TRAXXAS TQ-4 RADIO & 4-CHANNEL MICRO RECEIVER

The Summit comes equipped with a 27MHz transmitter that has four channels. It has the standard throttle and steering trims plus a thumb switch to change gears. A three-position switch on the front of the transmitter lets you lock the diffs. The up-position is open diffs, middle is front locked diff, and down is both locked diffs.

TRAXXAS 2075 WATERPROOF SHIFTING SERVOS AND 2065 SUB-MICRO SHIFTING SERVOS

The Traxxas Summit uses a number of servos to control different aspects of the truck. The steering is done via two Traxxas 2075 waterproof servos that each put out 125 oz.-in of torque, for a combined rating of 250 oz.-in. The three shifting servos (one for the transmission, and one for each diff) are controlled by 2065 waterproof sub-micro servos.

TRAXXAS EVX-2 WATERPROOF SPEED CONTROL AND TITAN 775 MOTOR

No surprises here; the Summit comes with the proven EVX-2 speed control. It's 100% fully waterproof and can handle two 6-cell or 7-cell batteries. It has a pushbutton on/off switch and three profile modes—sport mode, race mode and training mode, which limits throttle to 50% for first time drivers. The Titan 775 motor is new to the Traxxas lineup and is actually a 10-turn, a much lower wind than the typical crawler motor. It gets its torque from its massive 42 x 66mm can and an extra wrap of steel that increases its magnetic field.

TOOLS AND ACCESSORIES

Some of the tools include a 17mm wheel wrench, slipper wrench, 5mm turnbuckle wrench, antenna wrench, an assortment of hex wrenches and a 4-way nut wrench. There are even more tools, some adjusting shims and extra body clips, basically everything you need to maintain your truck.

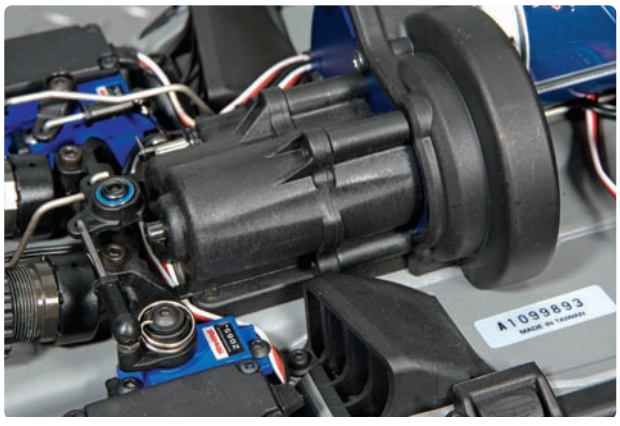
The Traxxas Summit has a cool scale-inspired body. It's made out of tough Lexan and features a realistic looking ExoCage. The cage is made out of flexable plastic to withstand crash abuse and is secured to the body with 2mm and 2.5mm screws.

TITAN 775 MOTOR & HEATSINK MOTOR PLATE

Unlike other monster trucks from Traxxas, the Summit uses a new high-torque Titan 775 motor. It features a closed endbell and has a built in fan for cooling. The Titan 775 motor is connected securely to a motor plate that attaches to the transmission. The motor plate accepts any size motor, so whether you use a 775, 550 or 540 motor, you can bolt it up to this truck. I test- fit the truck with a Castle Creations Mamba Monster; it was a super tight fit but it dropped right in.

HIGH-LOW TRANSMISSION

The Summit comes equipped with a heavy-duty high-low transmission. In high gear, you have a 25:1 gear ratio for high-speed passes and bashing around the track. For rock crawling and hitting the trail, first gear is a super low-torque 70:1 ratio. Like the E-Revo, the Summit is "Brushless Ready" thanks to a heavy-duty transmission with steel idler gears. It is also equipped with an adjustable Revo-spec slipper clutch to further ensure drivetrain reliability.



YOU CAN RUN AT NIGHT, GO THROUGH WATER AND GO ANYWHERE

BATTERY COMPARTMENT
The Summit, like the E-Revo is equipped with enclosed battery compartments. They have two-quick release tabs so you can quickly and easily change out your battery. To keep things cool, the Summit has built-in battery scoops that allow cool air into the battery compartment and a vent in the back to allow the hot air out.

TUNING TIPS

The Traxxas Summit is a great vehicle out of the box. Here are some running tips that will give you better performance and longevity from the truck.

SHIFT AND LOCK WHEN GOING SLOW

This truck features remote locking diffs and a remote 2-speed transmission. Both are activated by a switch on the transmitter. To shift gears or to lock up your diffs smoothly, always do it while moving slowly. Shifting at a full stop can put unneeded stress on the servos, and trying to shift at full speed could prematurely wear out the components.

ROCK-CRAWLING SUSPENSION

The stock suspension on the Summit works very well and soaks up the big jumps and handles the corners with ease. In our experience if you do more off-roading and rock crawling with your Summit, get some stiffer springs to make the truck more predictable and to act more like a solid axle crawler.

CLEAN OUT YOUR BATTERY BOX

Traxxas was smart and put holes inside the battery boxes to drain out mud and water. If you get your Summit really dirty after a run, take your battery out of the holder and make sure the battery box is clean and that nothing is jamming the holes. The battery will stay cooler in a clean battery box, and sand, mud and water won't continually be rubbing against your battery.

BEHIND THE DESIGN
WITH OTTO ALLMENDINGER

The original T-Maxx established Traxxas as a design leader, while the breakthrough design of the Revo and E-Revo cemented Traxxas' reputation for outside-the-box thinking and innovation that works. With the Summit, Traxxas has once again demonstrated its engineering prowess with technologies that are well known to full-scale 4x4 fans but have never appeared in an RC vehicle: remote-locking differentials and a remote-operated high-low transmission. These features, along with the realistic ExoCage body and crowd-pleasing LED lighting system, set the Summit apart not only from the crawling status quo, but the RC monster truck scene in general. For insight on the development of the Summit, we sat down with Traxxas' Otto Allmendinger, who lead the Summit design team.

RC Car Action: When did Traxxas start working on the Summit project?
Otto Allmendinger: Even before the E-Revo made its debut as an electric racing monster truck, we had ideas for using the platform to create the ultimate all-terrain monster with a ton of suspension travel that could just do anything—just a big, tough four-wheeler. As we watched the rock-crawling scene grow, we realized we had a real opportunity with the E-Revo platform; here was a truck that combined the handling of the Revo with 120mm of suspension travel for incredible climbing ability. We all thought it would be great to have a truck that could rock-crawl, but then shift into high gear so you wouldn't be stuck going 5mph between rock piles.

RCCA: What segment of the project was the most time consuming or difficult to complete?

OA: T-Lock was a challenge. The mechanism itself is simple, the challenge was making it compact and durable, and reliable in all conditions. That's why its fully enclosed, and the pivot arm turns on ball bearings. The Summit's a big, tough truck, so the diffs had to be just as tough. We really beat on it before giving it the green light for production.

RCCA: Overall, what do you think is the most significant design element of this truck is?
OA: The T-Lock differentials. That's the feature that blows people away. We displayed the Summit at the SEMA show [Specialty Equipment Manufacturers Association show, the top show for the full-size automotive performance industry], and T-Lock really got people excited. T-Lock, combined with the high-low transmission, is what gives Summit its versatility. It's easy to get wrapped up in the Summit's crawling ability, but with T-Lock, the high-low trans, and waterproof electronics, the truck can really go anywhere. Digging in mud, climbing loamy dirt hills, gravel piles—the most fun I've had with this is trying to find things it won't climb. Honestly, unless the truck is on its lid like a turtle, it's not stuck. It's very difficult to put the Summit in a situation where you can't drive out of it.

RCCA: Traxxas has been offering more and more hop ups; what will be available for the Summit?
OA: We'll have additional light kits, so that you'll be able to add even brighter LEDs and make the light bar on top of the body functional. You can fit the various wheel and tire combos that we offer for the Revo and Maxx trucks with 17mm hubs, and the red-anodized aluminum pushrods and Tubes toe-links for the E-Revo also fit the Summit. I'd say you can upgrade the shocks, but the Summit already includes our hard-anodized, teflon-coated GTR shocks standard. It even has titanium-nitride shock shafts. It's a loaded truck.

RCCA: The E-Revo and E-Maxx use two motors; what reasons did you have to switch to one on the Summit?
OA: It all comes down to performance. We found the single 775 motor gave the best combination of torque and efficiency, with the added benefit of lowering the truck's CG and overall weight. That's an important consideration for a high-riding truck like the Summit. The lower CG also allows it to deal with steeper inclines.

RCCA: Would you like to see a class for the Summit open up in competitive rock crawling? Do you think it will happen?
OA: Sure, that would be terrific. It would really be exciting to see courses that exploit Summit's high-speed capabilities. You could crawl through a rock course in low with the diffs locked, then unlock the diffs and shift into high to sprint to the next part of the course. And put a mud-bog in there, the Summit is waterproof!

RCCA: How do you feel the Summit compares to Super class rock crawler?
OA: A dedicated Super-class rig is an amazing machine, but it only does one thing: it rock-crawls. You can't jump it, you can't wheelie it, it can't go through water…in that respect, the Summit will clobber any Super-class truck. Now, if you want to compare only pure crawling performance, that's a different story. But I think Summit will surprise a lot of hardcore crawlers. The Revo suspension gives it tons of travel and articulation. It really can crawl.

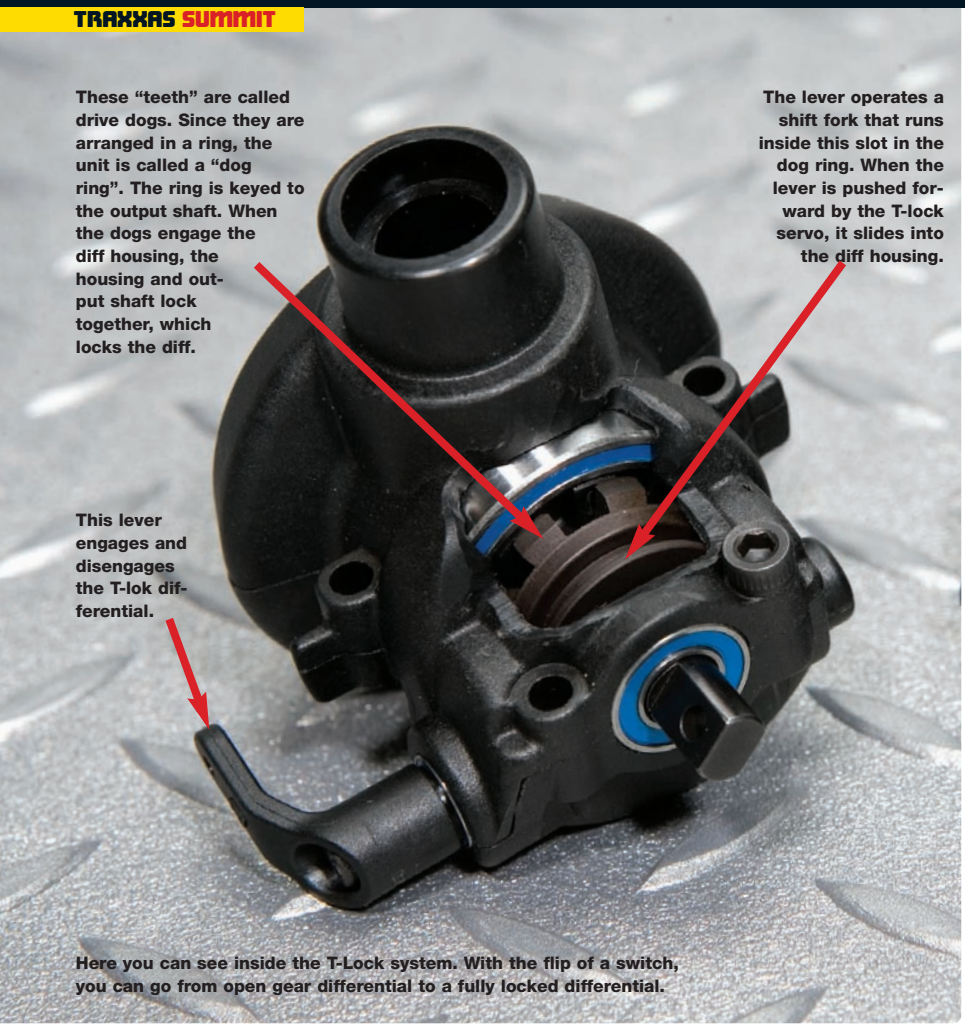
RCCA: What kind of future does Traxxas have in rock crawling; do you see yourselves doing anything else besides the Summit?
OA: You'll just have to wait and see! We could easily do "just another solid-axle crawler," but that wouldn't be our style.

RCCA: What kind of brushless system and gearing would you recommend for the Summit?
OA: We don't have any recommendation right now. Honestly, the stock Titan 775 motor setup is all you need.

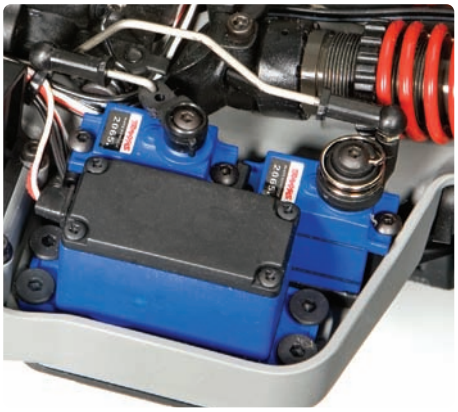
RCCA: How hard is it keeping your hot new products top secret?
OA: It's as easy as keeping any secret: you just don't tell anybody! Fighting the urge to tell someone how cool your new project is, well, that's another story.

RCCA: Do you think the transmission and diffs on the Summit will be used by modelers to make custom projects?
OA: Never underestimate the creativity of a motivated modeler. I won't be surprised at all if they start turning up in custom projects, but it sure is hard to beat those parts in combination with Summit's Revo-spec suspension. All the parts work in harmony.

RCCA: Where did you draw from inspiration for the body?
OA: We wanted that "serious off-roader" look. That's where the ExoCage skeleton, chunky bumpers and bolt-on fender flares came from. The body itself is a mix of traditional truck styling cues, with a little "Traxxas muscle" for good measure.



Here you can see inside the T-Lock system. With the flip of a switch, you can go from open gear differential to a fully locked differential.



The Summit uses a total of 5 servos. Two 2075 waterproof servos for steering duties, and three 2065 sub-micro servos for shifting gears and locking the diffs.

In the foreground is the three position switch to lock and unlock the diffs, and in the background you can see the bright red 2-position switch that selects high and low-range.

THE TRAXXAS T-LOCK SYSTEM

The Traxxas Summit is the first vehicle to hit the market that incorporates a remote-locking differential. The patent-pending system is called T-Lock, and with the flick of a switch, you can have open diffs, front locked diff, or both front and rear locked diffs. Two servos control the diffs, one for the front diff and one for the rear. When the transmitter switch is in the up position, both diffs are unlocked. In the middle position, just the front diff is locked. In the down position, both diffs are locked. The T-Lock system only takes a moment to lock the diffs; once the drive dogs line up with the slots in the diff housing, they slide into place and the diff is locked. Just drive slowly and then lock the diffs; you can hear and feel a difference when they are engaged. Open diffs are like ones used on a regular monster truck and are good for racing, jumping and bashing around. For maximum traction on the rocks, lock all the diffs. When you are off-roading and want speed and some climbing ability, I find the front only being locked works well. You also don’t lose as much of a steering radius.

THE SUMMIT DEFINITELY CAN GET UP AND OVER THE ROCKS

PERFORMANCE

ROCK CRAWLING I took the Summit to Burr Pond State Park in Torrington, CT to test its rock crawling capabilities. The park has a number of different types of rock from small rocks to medium size boulders to large shears of rock. First off, the suspension system works great on the rocks. The truck is very stable and likes to stay planted. Due to the progressive nature of the suspension system, the way the tires go up and over rocks is very predictable and better then I thought it would be. The new Traxxas tires are very sticky and hooked up to a number of different types of terrain. It looks like it rides low but has a ton of ground clearance, due to the fact that there's no center pumpkin to crash into obsticals and the size of the tires. One of the coolest features however, was the ability to lock and unlock the diffs from the transmitter. This was useful when needed the tightest possible turning radius. The remote diff locking worked great, and it instantly locked the diff. Sometimes I would have to keep the truck moving slowly so it would engage cleanly. While standing still sometime the diff won't fully engage until you start moving. While not a single purpose competition crawler, the Summit definitely can get up and over the rocks.

FULL SPEED AHEAD After going through a number of battery packs on the rocks, it was time to do some bashing around with the Summit. I headed over to the Torrington BMX track and put the MaxAmps.com 7-cell batteries in. I started driving around the track and took some jumps. The truck was no slouch. The tires were definitely not race spec but did hook up on the track. They wobbled a little in the corners but for the most part had traction. With a smaller, lighter body and race tires, this thing could have made some decent laps. I went to the pavement area of the track and did some wheelies. I locked up the diffs and it was even easier to wheelie. Don't lock the diffs for jumping around or bashing on pavement, though, as you could wreck an axle that way. Going back to unlocked, I did some speed runs to see what the Summit could hit. As an all-purpose vehicle, I didn't expect the numbers to be high, but they were quite respectful: I got a top speed of 20mph with the 7-cell packs.

OFF-ROAD Once all the "official" testing was done, it was off to the woods near the track. Hey, it's an off-road vehicle, so it's time to hit some trails. A little section people hike on goes through a stream of water about 6 inches deep. I gunned it and blasted through it. With the locked diffs, the truck had no problem plowing through the water. I'm glad because the water was freezing, and I wouldn't have wanted to go in to retrieve it. I went back and forth and up the muddy side of the trail. It was a real blast, and not only could I go through quickly, but I could also shift down to first gear and really go the difficult routes. I let the truck sit in the middle of the stream and really get saturated. No hiccups or problems; when I hit the throttle, the Summit took off. With the ExoCage body and the working lights, the Summit looked really cool wherever I took it, and more than a few people were eyeing it. End of the day came, and there was no breakage. I let the truck dry out and packed it away in my car.

FINAL THOUGHTS

After running the Traxxas Summit, there's only one conclusion. It's one of the best monster trucks ever. Whether you are at the BMX track, in the backyard, or on the rocks, the Summit gets the job done with ease. You can run at night, go through water and go anywhere with its off-road tires and wheels, and the remote-locking diffs are an industry first. Not only is it cool that you can lock the diffs, but you can do it from the transmitter. On top of that, shifting gears is at the flick of a switch. If you are looking to get a monster truck, or want one that can truly do everything, this is the truck for you.

sources

MaxAmps.com maxamps.com
Traxxas traxxas.com