

# WHO NEEDS SMOKEY ANYWAY?



#### QUICK SPEC

*Manufacturer* Traxxas USA  
*Type* RTR 2WD Electric Buggy  
*Price* £324.99 RRP  
[www.LogicRC.com](http://www.LogicRC.com)

*Scale* 1:10th  
*Power* 2WD Electric  
*Length* 423 mm  
*Width* 250 mm  
*Wheelbase* 286 mm  
*Weight* 1.4 kg



Ok here's my big confession, I stand before you and will openly admit that amongst my collection of R/C cars and paraphernalia I actually don't own a purpose built, 2WD buggy... A Stadium Truck yes, **Short Course definitely, even a Speed Run special... but no buggy, how sad is that!?** That's why I was really pleased to be offered the opportunity to review and thoroughly test the 2010 version of the Traxxas Bandit. This was first introduced way back in 1995 in its original form and is Traxxas's only 1/10th scale 2WD buggy. It has undergone some cosmetic changes over the 15 years it's been in production, but at its heart are the same basic components, and as the saying now goes... 'If we can't break it, why change it!?'



The Bandit shares most of its parts with the Rustler VXL including the central chassis, 3500 kV Velineon Motor, 3S compatible Velineon ESC, waterproof digital steering servo, steel internal transmission gears, rear shocks and shock tower, and the new 2.4 GHz TQ 'Link' radio system. The only differences include shorter front and rear suspension arms, camber and steering links, buggy style smaller diameter narrower wheels and tyres, and a buggy style body with rear wing.

As the company that 'originated' and single-handedly 'invented' the RTR market Traxxas are very good at offering a complete package. The VXL Bandit in theory only really requires you to purchase a set of transmitter cells, and after charging the supplied 3000 mAh, 7-cell, 8.4 V main pack you can let the fun begin.

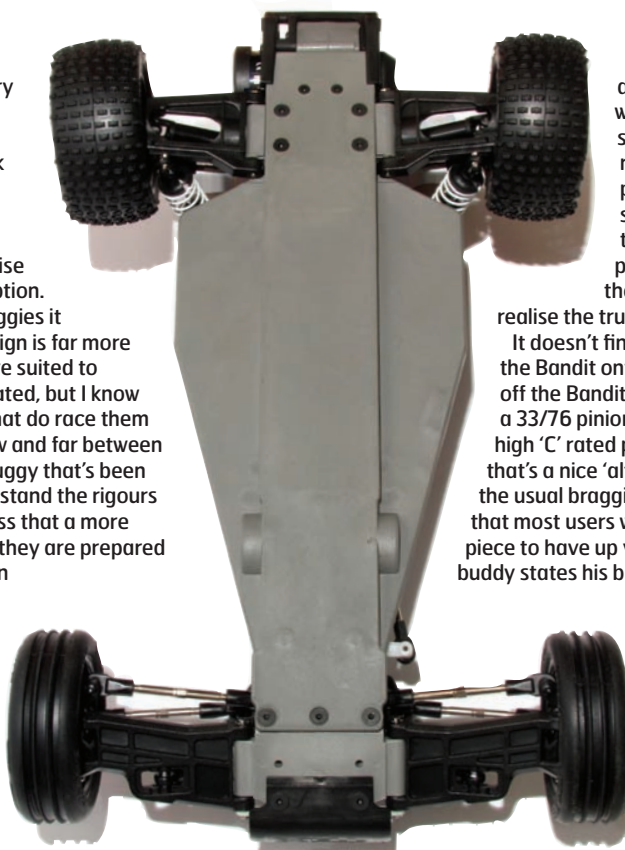
**IT'S A BUGGY... OR IS IT?**

It can be sometimes very hard to categorise certain R/C cars, and the Bandit is no exception. Compared to the latest 2WD race-spec buggies it is heavier by nearly 300 grams and the design is far more 'rugged'. The components used are far more suited to bashing than being completely race orientated, but I know for a fact that there are people out there that do race them (one at my local club), but they are very few and far between here in the UK. Initially this all points to a buggy that's been designed to run just for leisure, built to withstand the rigours of say a younger driver, or survive the duress that a more experienced driver can inflict on a buggy if they are prepared to push the envelope a little. I am more than prepared to test that last theory and even have the envelope ready to be pushed!

All this aside I stripped the Bandit to components and recognised the family bloodline straight away. The Bandit uses many components also found in other Traxxas models like the Stampede and Rustler, so is in theory more of a hybrid of the three. This makes sourcing spares

*Right: A robust and simple chassis design, just at home bashing or racing*

*"As the company that 'originated' and single-handedly 'invented' the RTR market Traxxas are very good at offering a complete package"*



an easier task, as even if the part numbers are different, if you recognise the part, it will most of the time fit! The transmission is exactly the same unit used on most of the electric

Traxxas models right through to the latest in vogue Traxxas offering, the 2WD Slash Pro. I would actually like to research further the order that Traxxas released the different models, to see what came first, the Monster Truck, Stadium Truck or the buggy!

**70 MPH... WITH A BUGGY?**

Although the gear ratio has been adjusted slightly, its internal 2.72 ratio, with a final drive ratio of 7.94 uses a 76t spur and 26t pinion to aid the Bandit to reach a stock speed of 35 mph on a 6-cell pack. This is a pretty impressive off road speed in stock mode, but considering that by simply fitting the provided 28t pinion and included 7-cell NiMH pack this then jumps to around 45 mph you start to realise the true potential of the VXL system!

It doesn't finish there though... if you intend to take the Bandit onto Tarmac you can actually gear the bits off the Bandit for purely doing speed runs. Running a 33/76 pinion and spur combination, and a suitable high 'C' rated punchy 3S LiPo... 70+mph is possible, now that's a nice 'alternative' way to spend an afternoon! It's the usual bragging rights thing, and in reality something that most users won't actually do, but it's a great party piece to have up your sleeve if the mood takes you or your buddy states his buggy is faster than yours...

**UK PROOF ESC**

The biggest advantage of the VXL system is the fact that it's 100% waterproof. Most brushless I've encountered loath any moisture at all, and being sensorless the VXL won't suffer from 'Damp Sensor Wire Syndrome'... something that's blighted many a race day and testing session here in the somewhat damp



**Above:** Tough 'A' arms, and turnbuckles as standard offer performance and durability



**Above:** The front axles spin on shielded bearings, and as ever all components are 'Traxxas Tough'

UK climate. The internal electronics are actually 'potted' and by that I mean that they are sealed inside the case, and won't in any way allow for moisture to attack any of the ESC's components.

A little word of warning here though. I actually experienced what at first I thought was a major malfunction on the ESC after my initial run on a dirt track. The symptoms were that the ESC would turn on OK, but went through a continual loop of the set-up procedure, indicating that throttle, neutral and brake parameters needed to be re-entered. This was duly done and then the loop was started again... very frustrating. After about 15 minutes I eventually traced the cause and it was simplicity itself to rectify! The single EZ set button used for setting Cell Type, End Points and ESC Mode, was getting stuck in the 'On' position by minuscule and almost dust like grains of dirt and debris kicked up while on the track. This then got caught between the casing and button, jamming it in place. A quick blast with an air compressor and a firm press sorted this issue out, but it's worthwhile remembering and watching out for!

Don't let the fact that the VXL system is sensorless put you off, as whoever designed the software that the ESC uses to control the motor did a great job. I suffered very little if any cogging, and the delivery of power is progressive and controllable. It's just as happy running at low speed as flat out, not something I can say of all sensorless systems!

**VXL PACKS A PUNCH**

The motor supplied with the Bandit VXL is a 540 can size Velieon 3500 kV item and is a great balance between torque and rpm. The rule of thumb with all brushless motors is that the kV rating indicates the rpm per volt applied, so with this motor and the supplied 8.4 V pack, you would get a peak rpm of 29,400 so not to be sniffed at! This of course can be calmed down in the programming of the ESC and the VXL-3s is programmable with three drive profiles:

- **Sport Mode, offers 100% Forward, Brake and 100% Reverse**
- **Race Mode, offers 100% Forward and Brake without Reverse**
- **Training Mode gives just 50% Forward, Brake and 50% Reverse, and is designed to be ideal for the novice or younger driver**

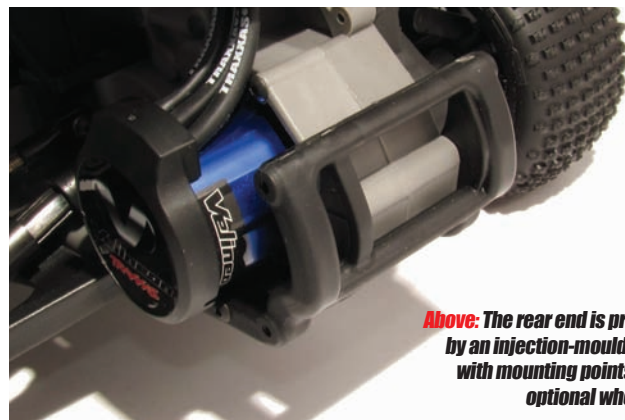
The great thing about the variation in modes is that this buggy can in theory be given to a complete novice, and run in Training Mode on a 6-cell pack. This will then offer half throttle to acclimatise the owner and as their confidence grows you can switch back to Sport Mode and make things a little more interesting to drive. I tested this theory and in a rare moment of madness offered the Bandit to my wife to drive in Training Mode. Being only the second ever R/C car she's driven, it really improved both her chances of staying in control, and the Bandit's chances of surviving the process!

**IRONING OUT THE BUMPS**

The supplied shocks are standard Traxxas issue, and I've never had any complaints with them in all my years running Traxxas products. They just work, period and are both easy to tune for action, and to set ride height with the included pre-load spacers. The springs supplied work well with the viscosity of oil used at the factory, though it's hard to actually pin down what weight is 'stock' in the manual, it feels in about the 30-35w range. Fitted as standard are 2-hole pistons but there are also 3-hole alternatives supplied on the spare parts tree.



**Above:** A waterproof 2027 Digital servo takes care of the steering, well protected by a large servo saver



**Above:** The rear end is protected by an injection-moulded skid, with mounting points for the optional wheely bar



**Above:** Rear carriers allow quick and easy changes to camber, the telescopic driveshafts may look 'Old School' but work flawlessly



**Above:** The 3-shoe slipper is a Revo-spec item, meaning it can handle anything thrown at it



**Left:** The 6-gear diff allows fine-tuning by packing with grease, but the seal isn't perfect so avoid silicon oils  
**Below:** The slipper laid bare... Its 3-shoe design can withstand the high temperatures associated with running in 3S Mode...



**Above:** Waterproof receiver box and potted waterproof VXL ESC allow you to run where others fear too!



**Above:** The Velineon VXL-3S ESC offers both sensorless and sensed operation, brushed or brushless motor configurations...

Having run the car for about nine full packs by the end of a day's initial testing, there were signs of leakage, but believe me these shocks took a hammering, especially on the dirt track so I forgive them this minor indiscretion. It's a simple task to strip and re-build them, and in doing so I smeared all the O-rings and volume compensating rubber diaphragms with Green Slime to ensure a perfect seal. I really took my time to ensure all air was removed when re-filling them with 30w oil and then installed them back onto the shock towers and control arms. Touch wood, so far they have been intact and working flawlessly ever since, so it just goes to prove it's really worth taking your time to re-build any RTR shock, as they are one of the most important components on any R/C car and usually benefit from just a few minutes loving care.

## THE METRIC SYSTEM

What really does annoy me at times is getting a car in for review that mixes both Imperial and Metric hardware. This leads to having to carry in theory almost twice as many tools with you at a race meeting or when out bashing. Luckily everything on the Bandit (as with all other Traxxas models) is Metric Hex hardware and hardened nicely so it will last. Other items used throughout the construction like the 4 mm steel turnbuckles shod with heavy-duty rod ends show a similar regard to quality and longevity. This buggy isn't built to just last a few runs and then need a major re-build and various components replacing, it's designed to take some serious abuse, withstand it and come back for more, time after time. The bathtub chassis isn't perhaps the most aesthetically pleasing item I've ever seen, but it does its job as the anchor point for every major component fitted to the Bandit and is immensely tough.

The plastic used in the chassis has a little 'give', and this helps to stop any breakages. The moulding is quite thick walled but this extra weight is pretty low down so actually doesn't affect the buggy's handling at all. I've always thought that Traxxas's habit of having servos hanging down under the chassis a strange approach, but to this day I've never had any damage caused to one or suffered a steering problem as a consequence. What I would recommend though is to regularly check the servo saver for dirt and debris as anything that will hinder its effectiveness can strain and cause damage to the servo's gears. What you may find is that dirt gets trapped between the two halves and stops the 'give' that servo savers must offer. Stripping and cleaning this may be an inconvenience, but could save you having to replace the steering servo prematurely.

The other type of plastic used by Traxxas in the construction of the Bandit is the far more flexible and softer feeling compound used for the shock towers. For a buggy designed for fun and bashing this makes complete sense, as the extra flex on offer can make all the difference between having broken components or bent shock shaft after a heavy tumble. For a buggy designed for racing, a stiffer shock tower would be advisable, letting the shocks take on completely the job of mirroring the changes in surface level and terrain, and in turn keeping the wheels firmly planted on terra firma.



**Above:** Ignore this warning at your peril... Green for LiPo... Red for NiMH



**Left and below:** The 2.4 GHz TQ Tx has features you would expect of a much higher priced spec item Dual rate, 20 model memory and end point adjustment to name but three





*"we took the Bandit on the Astro track and very quickly discovered that it's far quicker than we expected!"*

### GRIPPY OR SLIPPY?

The wheels and tyres are both futuristic looking and functional. To compliment the great looking Prographix painted and trimmed body, Traxxas have included a set of Metallic Black Chrome wheels with Alias step-pin rear tyres, and Alias ribbed front tyres for your driving pleasure. The compounds are pretty good for most surfaces, and even hooked up nicely on AstroTurf, helped along by the step-pin rears. The ribbed fronts gave a very responsive steering feel, and in a type of vehicle that usually benefits from adding a little extra stick on weight to the front end, this didn't seem needed at all. This combination, when combined with the diff that's been re-packed with grease during the strip down process offered a good balance between lift off over-steer for tighter corner apexes and power on under-steer for sweeping bends and tail out power-slides on the loose.

My only gripe is that the wheels use a pin location system and not a Hex Hub as with other Traxxas models. I've found through personal experience that if the wheel nut works loose in use pin location can end up stripping the inside of the wheel under brushless power. It's a minor gripe, but using a Hex system would open the Bandit up to far more tyre choice... all this said I can't really fault the stock tyres provided, with even an on road Anaconda 2.2 tyre option available. These sticky, high-traction tyres are made to offer better handling on paved surfaces and the proven Traxxas Anaconda design features large tread blocks that provide incredible grip and long wearing performance.

### PUT YOUR BUGGY WHERE YOUR MOUTH IS!

OK, so with the supplied 7-cell stick pack and a few 5000 mAh LiPo's in hand I arrived at the Baginton (with one G!) facility and with the help of Simon Shearing from the CMCC committee, gave the Bandit a test session it won't forget in a hurry! (And neither I feel will we!)

For a start we took the Bandit on the Astro track and very quickly discovered that it's far quicker than we expected! On the straight it accelerates very nicely from a standstill and was well up to about 40+ mph by the first turn, then my over exuberance on the throttle caused the dreaded grip roll and a tumble. Luckily the Bandit went straight back onto its wheels (something we discovered it does very easily) almost like there's a gyro built into self-right it!

We attempted the big double for the first time; it over jumped it by about a metre! We kept jumping the double from both directions and it popped it every time, after a few attempts it was easy to judge the speed required to cleanly jump from up, to down ramp in a fluid motion, then power out and away for the next corner. Changing the attitude of the Bandit in flight is an easy task, just by touching the brakes or holding the throttle on a wee bit longer. This is aided by its tendency to fly quite level in the first place! Even with the motor hanging way to the rear, the weight bias and balance has been

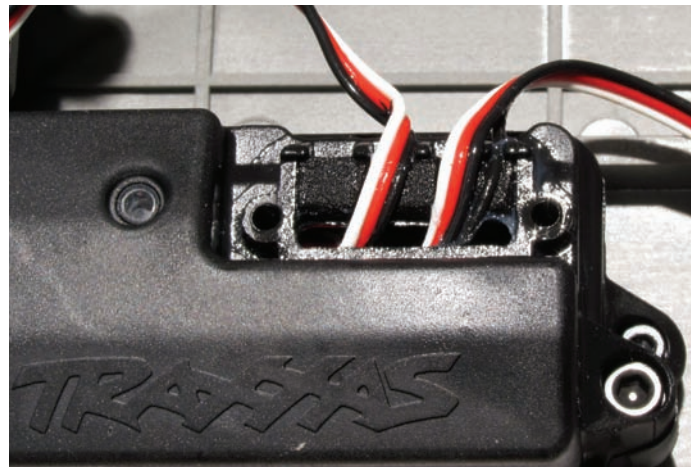


*Above and right: Front and rear tyres work fine on dirt, Astro and grass, but wear rapidly if used on Tarmac*





Above: The Link system means that the Tx will remember the settings and model memory for up to 20 receivers without you doing a thing!



Above: Even the ESC and servo wires are held in a waterproof 'trap' to prevent the ingress of moisture...

worked out really well. The stock shock oil does work well with the stock spring rates fitted and did a good job of keeping the back end planted. Body roll is evident and the lack of sway bars, especially at the rear, really shows. This aside the Bandit did handle much better than either of us expected and soon we were lapping consistently and pushing the buggy a little more each time as our confidence grew.

### MORE PUNCH PLEASE

The run time with the provided 3000 mAh pack was around 12-15 minutes, and as ever dependent upon how trigger-happy we felt at the time!

Moving over to LiPo power gave us slightly less voltage (7.2 V versus 8.4 V) but the 50C packs were far punchier, and delivered constant

performance without the drop off NiMH packs tend to have. One thing I made sure of though was that the LiPo low voltage cut out was activated with the 'Green For Go' LED in sight. It's important that you tell the ESC when NiMH or LiPo's are used, and set it accordingly as low voltage cut out may stop play prematurely with a NiMH fitted!

We next moved onto the highest grip surface available, and ran the Bandit on the grass track. The triple was attacked and defeated in the same style as the big Astro double, and on the grass surface only a short run up was required to pop it cleanly. I must admit that the Bandit did take many a tumble as it grip rolled far more on this surface and we did push things a little trying to clear the big central tabletop at full speed! There is also a small kicker that if hit just right can launch you right to the top of the other tabletop feature and with practice you can even land on the down-ramp; the Bandit just managed it, but it did take a few attempts!

*"The Bandit is fun to drive, and I mean really fun to drive!"*

### TAKING ON MUCH BIGGER OBSTACLES...

Moving onto the dirt track, the Bandit really excelled! I gave the transmitter to Simon, put in a new pack and watched the smile on his face grow as he took the Bandit to hell and back on the normally 1/8th or Short Course filled track. The jumps were a little extreme for the 1/10th buggy but it took everything Simon threw at it. The 'double double' was a hit-and-miss affair unless you got the perfect line out of the apex and found some grip on the way to it. If hit correctly this was poetry in motion, if done wrong all hell broke loose! The loose dirt is a great medium for the buggy to run on, with tail out power-slides possible if you intentionally drove through the looser parts of the track's surface.

A dirt track, like the one at Coventry is tough on any car that you run on it, but the resilience of the plastics used by Traxxas protected the Bandit from excessive wear and more importantly damage. Other than the expected dirt rash and a scuffed front and rear skid, the thing was 100% intact after a good hours hard running, and three full packs. All that was required was to blow off any dirt and dust with an airline, and the shocks checking and topping up with oil from a few really big landings (Eh Simon?).

The Bandit is fun to drive, and I mean really fun to drive! Don't think of it as a 2WD competition buggy, it's far more of a rugged, run anywhere leisure buggy and that's its forte. It's 100% waterproof, has a virtually maintenance free brushless system, is 3S LiPo compatible, has 2.4 GHz radio gear and can be run both on and off road (at speeds in excess of 70 mph)... how many other buggies can you say are this versatile?

If fun is your main aim with any new R/C purchase (and let's face it we all need a little fun and distraction from time to time), then join the thousands of other Bandit owners that also run one on a regular basis. I bet being this tough and resilient to damage there's still some of the original releases out there somewhere too... and I bet they still work perfectly! *RRCi*



### TECHNICAL SPEC

#### REQUIRED TO RUN

4 x AA batteries for transmitter  
Suitable 2 or 3S LiPo cells and charger

#### LIKES

Great buggy looks and 2WD fun  
Rugged and bash-resistant plastics used  
**High standard specification, brushless,**  
2.4 GHz, 3S compatible  
Amazing 70 mph top speed (with optional gearing)  
It's Traxxas and it's VXL...  
Metric Hex hardware

#### DISLIKES

Pin location for wheels not Hex  
Tyres suited for off road use only

#### CONTACT

For more info contact  
[www.LogicRC.com](http://www.LogicRC.com)