WORDS AND IMAGES: MATT TUNKS

JUST GO PRO!

QUICK SPEC

Manufacturer Xray
Type 4WD 1/18th Performance Micro Truck Kit
Price £167.99 (Kit Only)
www.rcdisco.com

Scale 1/18th
Power Electric
Length 228 mm
Width 180 mm
Weight 618 g
Wheelbase 166 mm
Gear Ratio 2.5

I'VE SEEN THE M18T BEFORE BUT IN ITS ORIGINAL NON PRO GUISE, AND I HAVE TO ADMIT IT INITIALLY FELT VERY LIGHT AND FLIMSY, BUT IN USE WAS ABLE TO TAKE EVERYTHING ITS OWNER, JASON "I CAN BREAK ANYTHING IN 2 MIN" MALCOLM COULD THROW AT IT! THIS PROVES TWO THINGS: FIRSTLY THAT I JUDGE THINGS TOO EARLY AT TIMES AND SECOND THAT LOOKS CAN BE DECEIVING, AS IT'S SURPRISINGLY STRONG, A TESTAMENT TO THE PRODUCT DEVELOPMENT AND DESIGN OF THIS XRAY 1/18 4WD PLATFORM.

THIS REVIEW WAS REALLY EXITING FOR ME, AS IT WAS MY FIRST EVER XRAY KIT BUILD, SURE I'VE BUILT OTHER 1/18 CHASSIS BEFORE, BUT THEY HAVE ALL NEEDED A LOAD OF MOD'S BEFORE BEING RACE READY (OR SHOULD I SAY 'JAYCE' READY!). THE TRUCK HAD HUGE SUCCESS IN THE US WINNING A MAJOR 1/18TH OFF ROAD TITLE TWO YEARS IN A ROW. WITH MUCH ANTICIPATION AND KNIFE IN HAND, I SET TO WORK AND BROKE THE FACTORY SEAL...

"Nearly-do' won't do with Xray, spot-on is the mantra that they build their kits to."

CABBAGE PATCH TRUCK

As soon as I opened the box it was easy to see why Xray have such a good reputation for their kits, all parts were neatly placed in separate 'build by the manual' bags. Each included a small piece of brown moisture sucking paper, used to keep the parts nice and 'factory fresh'.

Also worth a mention, and I'm sure it's boring to all you previous Xray owners (Mr Speedy) but I love the fact that every kit comes with its own birth certificate! So you know that the kit's genuine and when it was produced, and that you are its proud new owner... I fell just short of naming it, but it's a nice touch in a world of mass production, carbon copy design and anonymity.

PREP FIRST... BUILD LATER

Once all the parts bags were arranged to the order that they appear in the clear and concise manual's illustrations, I had a time-out. I know this may sound odd, as I was itching to build the truck straight up, but I knew I had to prep the carbon parts first for sealing. Out came the CA glue along with some 500 wet 'n' dry paper. I have sealed many chassis in this way and can usually find the small notches from the CNC machine and gently smooth them out, this was not the case with the PRO kit's carbon components, again another early showing of the thought involved with this and every Xray kit. Even every one of the countersunk screw holes is precisely cut at a perfect angle for the kit screws, not something I can say of every manufacturer out there. 'Nearly-do' won't do with Xray, spot-on is the mantra that they build their kits to.

Rounding the edges of each carbon part was a breeze, the big 'X' in the middle of the battery strap being my favourite design feature, and a nice aesthetic touch amongst the high-tech components and materials used. The chassis itself is a work of art with perfect machined holes, and cut-outs, more than enough options for whatever battery pack you choose and a large cut-out under the motor position to aid cooling. Weight

Above: *An optional (but included) steel spur can be used with the provided Nylon pinions*

Above: *Pre-assembled ball diff's speed up the build process, with just four main screws holding the cases together*

Left: *I chose the included plastic spur to marry perfectly with my Novak Mongoose's alloy pinions*

is kept to a minimum while still retaining maximum strength and durability. Not only has the chassis been changed and lengthened on the Pro version, also included in this kit are a full compliment of the excellent hop-ups and upgrades derived from, and for the original RTR truck.

QUALITY COUNTS

A full set of front and rear Hudy spring steel CVD's just glow with quality, the finish is amazing as to be expected from such a prestigious brand. Also included is a two-piece CNC alloy motor mount, the lower part uses recessed screws mounted under the main chassis for adjustment and the upper part simply slides along a track to adjust mesh. This makes setting the optimum gear mesh simple and easy, and the large surface area of the mount itself acting as an efficient heat sink during even the most demanding race conditions. The upper part of the mount also has multiple mounting holes for any power-plant you desire to fit, and even the larger can 380 motor from Novak dropped in with ease.

Another drivetrain upgrade is a steel spur gear that's intended to run with the supplied composite pinions and last longer than the plastic one. For this build I decided to keep with the supplied plastic spur because the Novak motor I had in mind for this build has a bigger shaft than normal, meaning I had to use alloy pinions. If these are combined with the steel spur you are simply asking for trouble (metal vs alloy at high speed, with no lube!), the noise alone would be simple terrible. Luckily a full range of alloy pinions are available from Novak themselves, with the correct mod 5 46 pitch teeth. Lastly on the upgrade front, Nickel-plated suspension balls, help the suspension parts smooth but slop free for far longer. The kit also comes with adjustable turnbuckles, anti roll bars and stiffer springs from the Nitro version to round off the ensemble nicely.

FINALLY... I CAN BUILD!

Starting with the gearboxes, the pre-assembled (yes and that's not a typo) ball differentials slot in with no trouble at all, and you then slip over the out-drive covers. Then it's a matter of installing the shaft drive gear and screw the top half down and hey presto two gearboxes! Again the quality of the components is second to none with no bits, or even indication of the moulding process in sight.

I did feel a small amount of side-to-side play from the differentials, but once the gearbox tops are on, this all but disappears. Next up are the lower wishbones, requiring the larger aforementioned nickel-plated balls to be pressed in, the wishbones remind me of those on the T-Tech Predator, sleek and aerodynamic in appearance. I also noticed you can adjust the roll centre by adding shims under the upper arm pivot balls for further fine-tuning. The manual specifies the length for the turnbuckles

"Also included is a two-piece CNC alloy motor mount, the lower part uses recessed screws mounted under the main chassis for adjustment and the upper part simply slides along a track to adjust mesh"

Below: *The wishbones may look flimsy but withstood everything I threw at them*

Below:: *Hudy CVD's are included, as standard, but what colour actually are they?*

Below: *The rear transmission, bevel gears transfer power straight from the spur to the diff's out-drives*

should be initially set to during the build (around 1 degree of rear toe) this is about the same as my other 1/18th race buggies, so should be a reasonable starting point.

I next installed the inner and outer hub bearings with the nice brown/red? (does anyone actually know what colour that is!) anodised Hudy CVD's. After bolting the two assembled gearboxes to the chassis it really starts to take shape, you can already feel how smooth the drivetrain is just by turning the carbon centre shaft over by hand. This fits the planetary gears nice and snug without that 'hand filed' feel most carbon shafts tend to offer in this scale. One of my main concerns with any chassis I build is the drivetrain. I end up having to strip and re-build everything ten times to get it just right, and maybe it's just my attention to detail, but it's a real PITA, with most 1/18th cars I've built. Lucky for me that the tolerances are so precise on the Xray, as there was no messing around with shims on this one, every part is perfectly machined and works in unison with the next component to give a smooth and drag free driveline.

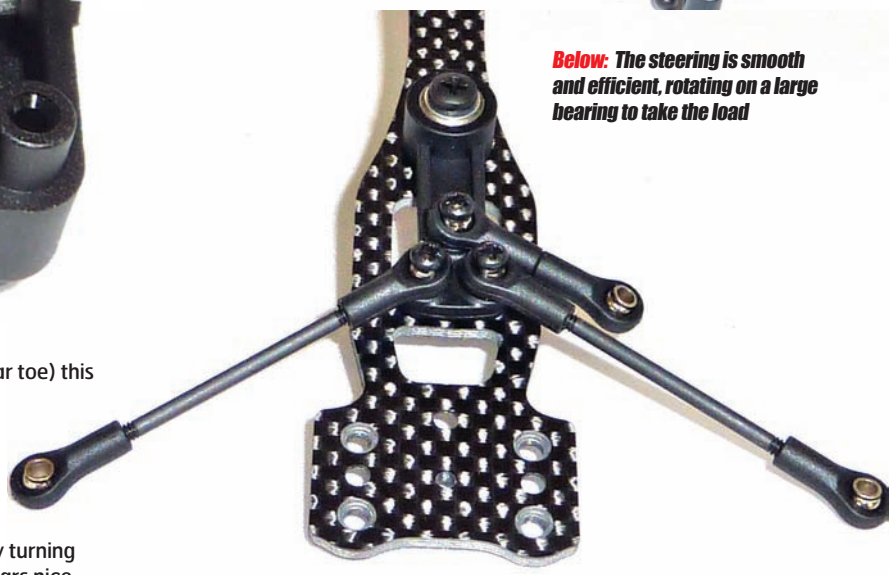
POSITIVE, SLICK AND PROTECTED STEERING

The bell crank steering assembly is amazing, mounted to the top deck on bearings and using some of the nickel-plated balls it's one of the smoothest, bind free systems I've tested, run and raced. Xray also makes the best servo saver on the 1/18th market, specifically for the

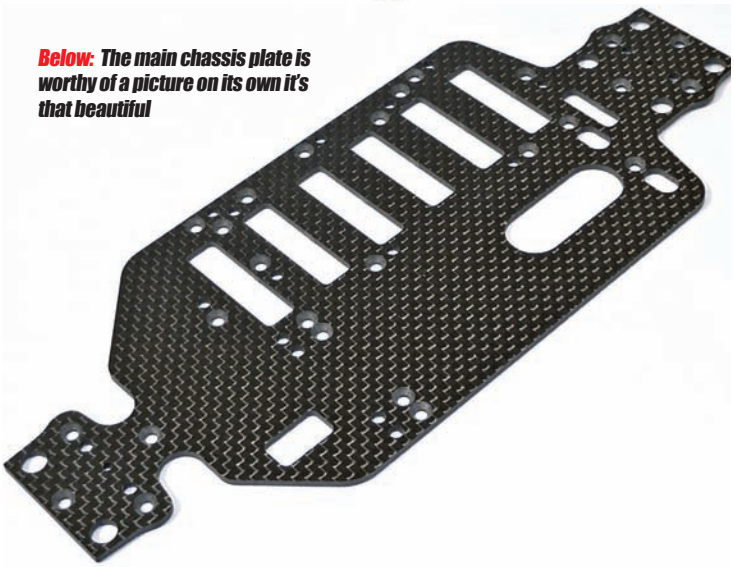
Below: *Vented dish wheels, foam inserts and Micro-Pin tyres work well on most surfaces*

Below: *Upper and lower wishbones installed, with CVD's and hub carriers in place*

Below: *The steering is smooth and efficient, rotating on a large bearing to take the load*



Below: *The main chassis plate is worthy of a picture on its own it's that beautiful*

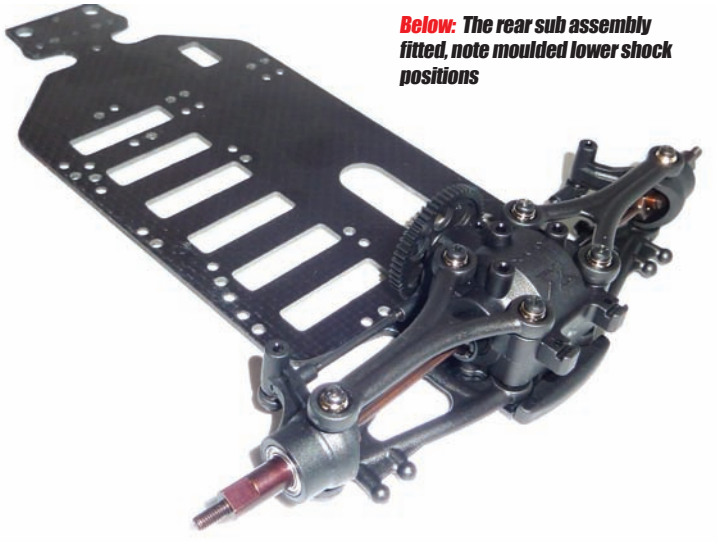


M18T range. It comes with two metal springs to adjust tension, and won't gradually work un-done like others out there. It prevents the truck from wandering off-line when going down the straights and aids holding a tight line around the corner apexes. The chassis has multiple options for different size servos, and comes with good solid mounts that not only use a screw in each to bolt them down, but also a small locating dowel on each block, taking the stress away from the servo ears.

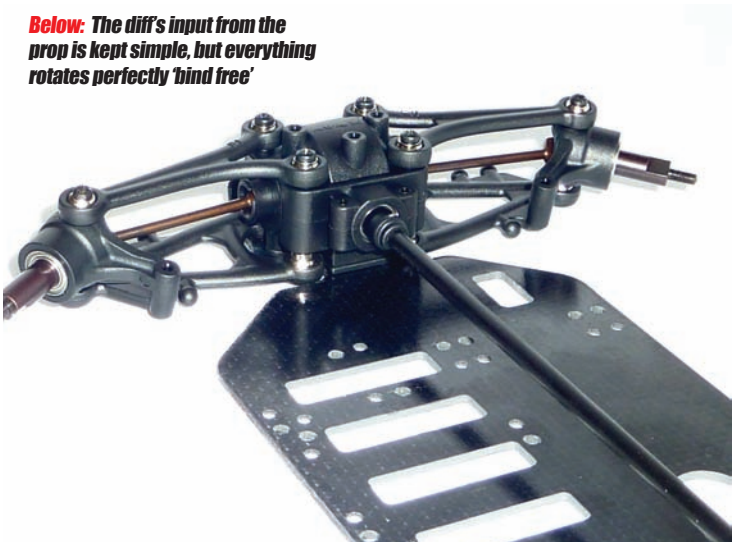
Next came the shocks. These are made from the same composite plastic as the suspension arms, and they should hold up to plenty of racing abuse. The all important O-ring seals are made using a good quality Japanese soft silicone, I smeared a little silicone grease over them before installation to prevent the threaded part of the shock shaft from possibly tearing them and affecting the seal under load.

The manual suggests you use the open type pistons, used along with the supplied 1000CST oil. To me they seemed way under damped so I switched to the 2-hole option combined with stiffer Nitro M18T springs, and the set-up felt much better.

Another 'Matty Modification' was to add 3 mm of internal shims to limit



Below: *The rear sub assembly fitted, note moulded lower shock positions*



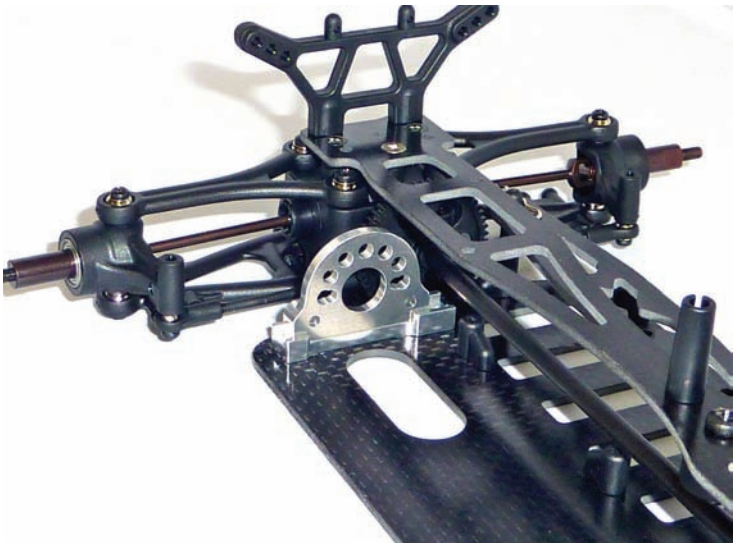
Below: *The diff's input from the prop is kept simple, but everything rotates perfectly 'bind free'*

all four shocks amount of travel, lowering the chassis and giving it some droop control. I mounted the shocks in the middle of the three mounting points on the shock towers (again these are made from the same composite material as the other plastic parts) and the outer positions on the arms. Looking at the way the truck sat I lastly added 3 mm spring spacers to raise up the ride height but still keep the C of G nice and low.

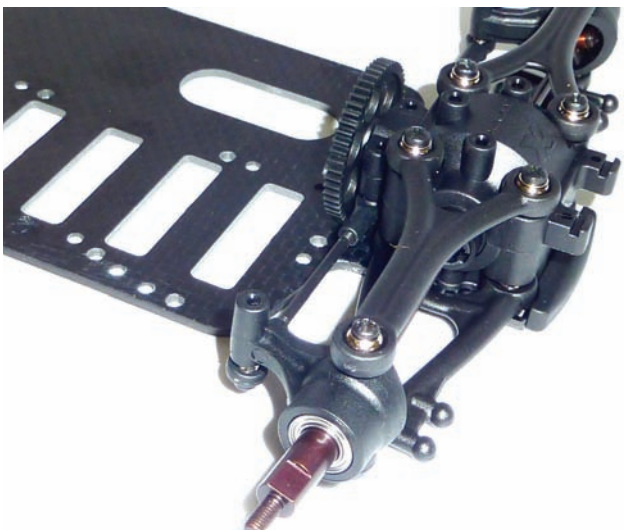
ANTI-ROLL

The anti-roll bars seem thick enough to give some roll control without taking away too much of the suspension's vital action. On a lightweight chassis like this it makes a huge difference to the way the truck handles. Like other scales that use anti - roll bars the arm links are adjustable,

Below: *A large, well-designed motor plate/mount helps dissipate heat and allows a variety of motors to be used*



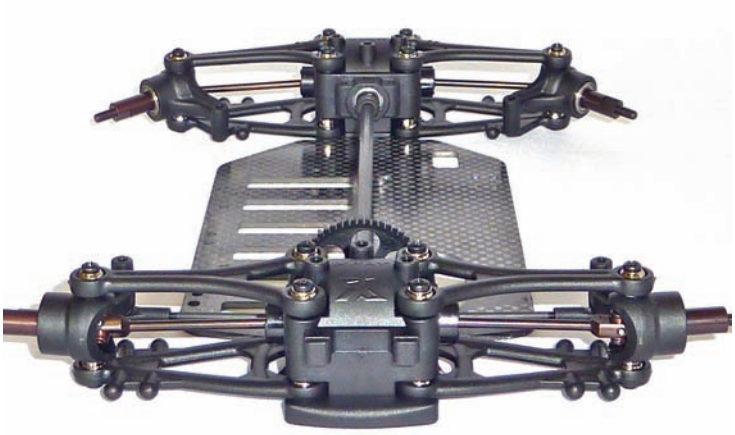
Below: *Note the use of large diameter pivot balls throughout to keep the suspension movement smooth and slop free*



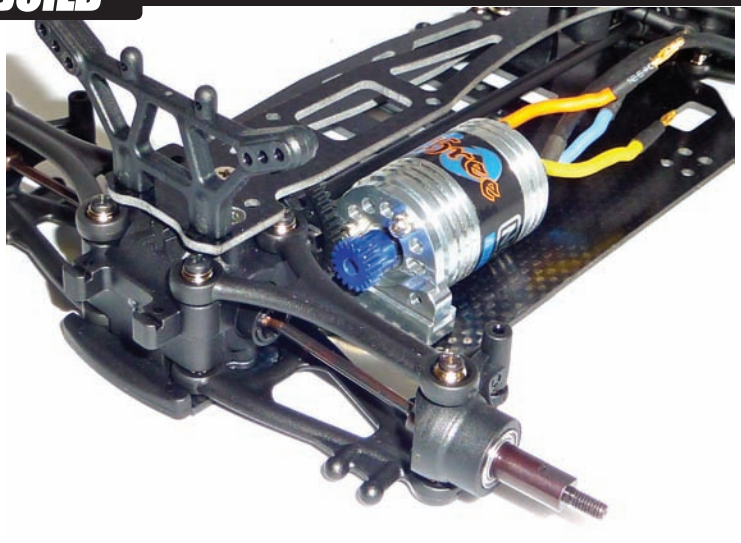
move the links in along each end of the bar to stiffen (low grip) or loosen (high grip) the anti-roll effect. The supplied soft compound Xray branded tyres offer good grip on most surfaces with a proven all-purpose 'block pin' tread pattern and just need the factory mould release cleaning off before gluing to the supplied rims. These are pre-vented allowing the medium foam inserts to do their job correctly and help the tyre's carcass deform when needed and generate traction and the ever-elusive grip!

The build was now almost ready for me to install the rest of the electronics, the long 166 mm wheelbase now showing through, so stability on larger tracks shouldn't be an issue. Naturally the Novak Mongoose ESC with its relatively small footprint fits in with ease onto the top-deck. The only problem I had was trying to find a gap for the power capacitor and the thick wire leading up to it! A few minutes with double-sided and the job was complete. My 2.4 GHz receiver was also neatly fitted and my chosen Venom 1800 30C 2S LiPo held in place perfectly by the battery bar. Once end points were set, and the brakes adjusted to offer just a little drag brake off the power it was time to get the body painted and fitted and get on track! Paint was applied to the truck's low-slung body by my buddy Marti from DG Graphics. It's not a job I can honestly say I love to do myself, and he pulled off a great job. The scheme goes from green to

" The supplied soft compound Xray branded tyres offer good grip on most surfaces with a proven all-purpose 'block pin' tread pattern and just need the factory mould release cleaning off before gluing to the supplied rims"



Above: *Good enough to be exhibited as a work of art let alone raced indoors...*



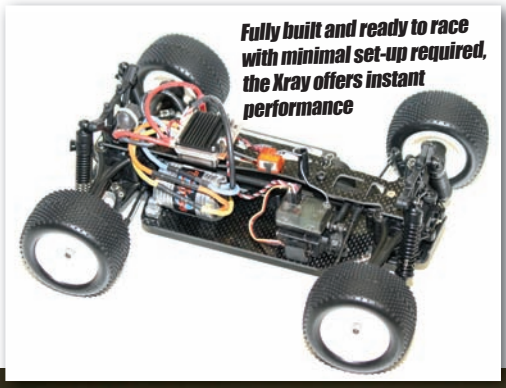
Above: *The 380 can size Novak brushless motor and its alloy pinions means a plastic spur was compulsory*

purple pearl under the black, chrome Xray/RRCi graphics, it compliments the black and white theme from the carbon chassis and white dish wheels very nicely, top job that man!

ON THE STRAIGHT AND LEVEL!

On the track the M18T Pro performs really well. It feels really planted and works well under most conditions found in an indoor Micro meet. From high grip carpet sections, to crash mats to drift sections the Pro gives good feedback and allows you to really take it to its limits. If you do push too hard the first indication of losing traction is that the back end will do a little dance for you but it's able to throttle out of most corners with precision thanks to the ball differentials.

It feels totally neutral in flight, and for something as light as this that's a good thing! I've seen cars using stick on ballast and undergoing many hours of set-up just to get the kind of handling on track and in the air the Xray offers right away. It does benefit from minor adjustments and like all classes of racing... tyre choice. The included boots will do for most outings, but wear rather quickly on tarmac (oh yes I ragged it on tarmac too!). I tried foams but suffered grip roll until I superglued the sidewalls. Tyres are such a personal choice, what works for me, may not for you and that's the beauty of this hobby and as ever experimentation is the key.



Fully built and ready to race with minimal set-up required, the Xray offers instant performance

INSTANT FIX

We then get the crux of matter here, the Xray's appeal and its statement of intent. Unlike some other trucks and buggies on the market that require a host of mod's, hop-ups and tweaks before they are reliable, consistent and 'race-worthy' the Xray has been designed with their racing heritage and two US National titles already present. It's then gone through another round of development and Xray have refined that original design to another level of performance all together. You don't need to spend the same again for the kit to be competitive, just build and race, it's really that simple.

It's a great kit with plenty of potential to keep the 'New Kids On The Block' at bay, it's an older design yes, but then it's had time to mature, evolve and grow, just like some of the best 1/10th off road buggies and trucks out there today. I will in a future issue report back on a full race meeting with the Xray, offer more insight in getting the best from it, and any set-up tips I can glean from the company itself. Until then it just leaves me to say that there's many of what I would call 'plastic fantastic' 1/18th buggies and trucks out there that blur the line between toy and hobby grade R/C. The Xray stands head and shoulders above these in so many respects.

The days of buying a base vehicle and then having to replace most of the parts to race competitively are long gone, and that's a good thing. I personally can't wait to see what Xray comes out with next, and with the Micro class and Micro racing having a resurgence of interest in the UK, there's never been a better time to get into the class. If you do jump in feet first, remember one thing, the Xray may cost a little more when you factor in the electrics and radio gear required, but you get instant performance and a truck that can compete at the highest level as soon as you finish the build. ***RRCi***

TECHNICAL SPEC

Used To Complete

Spektrum DX3R Tx and Micro Rx
Novak Mongoose sensored 10.5t Brushless Combo
Venom 1800 mAh 2S 30C main pack
High torque, metal geared micro servo

Likes

Steering assembly and servo saver
Hudy steel driveshafts and CVD's
Quality carbon fibre components
Smooth bind-free drietrain
Pre-built ball diff's

Dislikes

Time involved to prep CF components
Limited to where you can run and race

Contact

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