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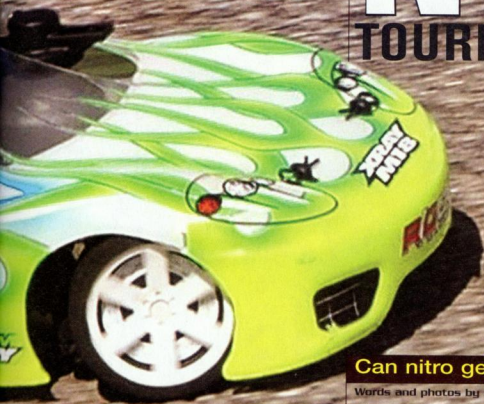
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TEST DRIVE

# XRAY NT18 TOURING SEDAN



## Can nitro get any smaller?

Words and photos by Brian Skinner

**E**very couple of years a new trend comes along, and it appears for 2006 that 1/18-scale nitro cars will be it. In fact it's got to be, because after testing the Xray NT18 we are so jazzed about driving it that we're sure you will be too. There's something novel and fun about a teeny-tiny car with a nitro engine that just makes you want to play around with it, and that's what we did. When the NT18 from Xray arrived at the office, we all gathered around to look it over and pontificated on how the little beast would perform; after all, this is the world's first production 1/18-scale nitro sedan. It has four-wheel drive, disc brakes, full independent suspension, and a neat little .8cc engine. Would it be like the 1/18-scale electrics? Was the .8cc engine fast, and would it drive well?



# TEST DRIVE XRAY NT18

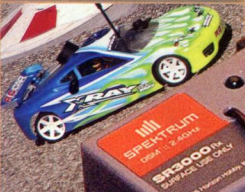
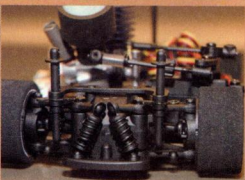
## KIT FEATURES

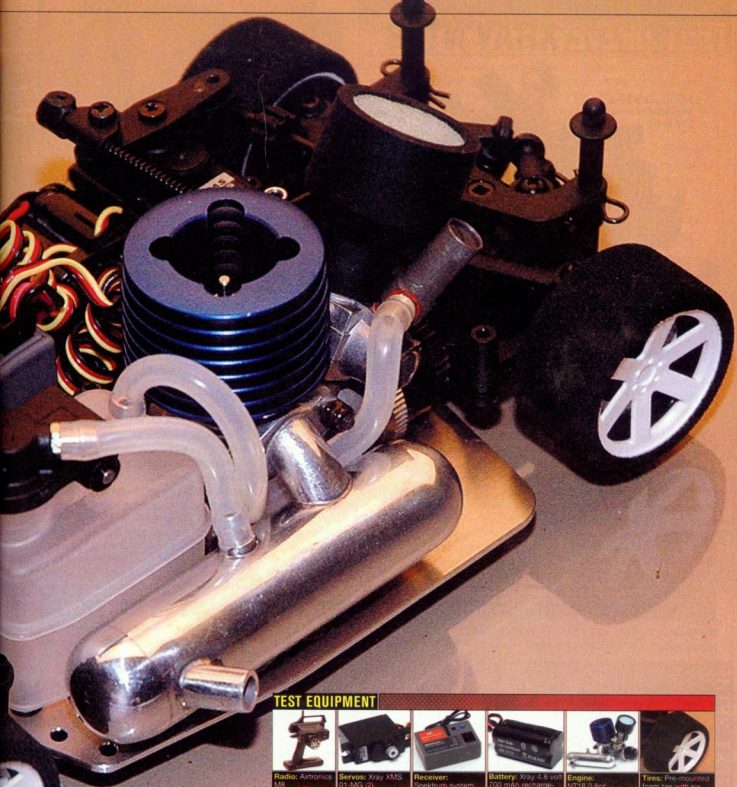
Although this is a new vehicle for Xray, and for that matter the R/C world, many of the features are a carryover from Xray's M18 electric sedan. This is wonderful, as a lot of the parts are compatible with each other and that helps keep the nitro NT18 production cost down. Compatibility means that the final cost to you will be lower than if it was built up from scratch, and it also means that parts availability will be there when you need it. Another nice benefit is that Xray is already making hop-ups for the M18 that you can buy as soon as you want for your NT18. Of course, the NT18 kit comes pretty well equipped right from the box. It has sealed bearings, two micro metal geared servos, and a 4.8 volt 700mAh rechargeable battery pack. For the price, this kit is very complete, and only needs a receiver and fuel to get you going. Nice work, Xray!

**Suspension.** The Xray NT18 comes with fully independent A-arm suspension with adjustable down-stop settings, as well as two-position shock adjustments front and rear. The shocks have been moved inboard *a la* F-1 style and helps give the little coil-over spring a good rising rate ratio. There are ball ends on the lower A-arms for sway bars, but we doubt you'll need them; the suspension is pretty dialed out of the box. A neat feature that struck our fancy was the way the lower shock mounts are on the front and rear. They are a ball and socket type of capture, and other than Xray, we don't think we've seen this before. It makes for quick shock angle changes and the system is responsible for holding the shocks together as well. The shocks themselves are a simple three-piece system comprising of a spring, a stanchion tube and a slider. Other than the spring, everything is made from plastic.

**Drivetrain.** First off, the whole car runs on metal-shielded bearings. Also, the NT18 is a 4WD system that has most of the features of its larger 1/10-scale brothers such as are aluminum driveshaft, a simple differential design to fit the micro diff cases, and a sweet mini disc brake that's no bigger than a dime. Cool ultra small plastic driveshafts complete the drive train, and all of the parts are well made and fit together perfectly. In fact, this is one of the best kits to come across our collective desks in a while. Build kits tend to show how well the instructions are (especially when it comes to assembling the drivetrain) and how well the parts are made. It's safe to say the Xray NT18 passed with flying colors!

**Steering.** The steering is standard issue drag-link style, and works very precisely, thanks in part to the well made and tight tolerances that Xray seems to continually offer in their products. The steering knuckles ride on





#### TEST EQUIPMENT



**Radio:** Airtronics MS



**Servos:** Xray XMS 01MS (2)



**Receiver:** Spektrum system



**Battery:** Xray 4.6 volt 700 mAh rechargeable battery pack



**Engine:** V718 0.8cc



**Tires:** Pre-mounted foam tire with the spoke plastic rim

**Fuel:** Byron fuel (micro engine fuel 25% nitro w/16% castor)  
**Body:** 150mm Xray sedan (unpainted) Paint by Korn Designs



Xray calls this "Special Flex Design"; it allows the chassis to have flex to keep the wheels tracking on the ground. It's tuneable and it works!



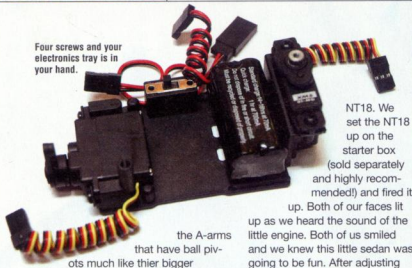
The diffs are simple and compact...nice!



That's the smallest disc brake we've ever seen; it's no larger than a dime!



# TEST DRIVE XRAY NT18



Four screws and your electronics tray is in your hand.

the A-arms that have ball pivots much like thier bigger brethren. Since the car is so small, Xray built the servo saver into the steering horn which works well and is a nice touch—especially with the ultra small servos the NT18 comes with. Overall, the entire steering package is a standard issue that you would find on cars twice the size and price.

**Chassis.** The Chassis is 7075 T-6 aluminum and 1.5mm thick, with great detail to finish, as all of the cuts have a small radial finish cut to them. The chassis also incorporates a one-piece molded radio tray that all of the electronics mount to. Simply unscrew four screws and it pulls away from the chassis for easy cleaning and maintenance. Last but not least, is a thing Xray calls a "Special Flex Design". This is a system where the chassis has deep cuts in the front end, allowing for the chassis and front-end to flex and stick the tires to the ground better. It also is adjustable by turning a single screw to reduce or increase lateral flex. This is a clever system and is not seen too often.

NT18. We set the NT18 up on the starter box (sold separately and highly recommended) and fired it up. Both of our faces lit

up as we heard the sound of the little engine. Both of us smiled and we knew this little sedan was going to be fun. After adjusting the throttle and steering, Hippy quickly grabbed the NT18 and shot out to the track. Hmm; "I guess Mr. Elitist likes the car," I thought to myself! After a few laps Charles started to drive a little faster and I could see him smiling and chuckling. Just as the first tank was running out, Hippy finally spoke out with a loud voice and proclaimed: "Dude, this thing is sooo fun—I want one!" Now it was back to the pits to let it cool down and get it ready for my turn.

While we were prepping the car, Charles was all gushing and saying things like, "Man this is cool, I can see a new class for Tuesday night racing." "Skinny, this thing feels like a good 1/10-scale sedan, it handles really well and it's pretty quick, too! Just wait until you try it." Wow! Hippy hardly ever gets this excited; this NT18 must be pretty good. Now it was my turn, and I was excited to see what Hippy was talking about. We fired the NT18 up again and it came to life immediately. In fact the little .8cc engine ran like a top the whole day and was pretty well tuned from the factory. We only need to adjust it after it had broken-in.

I headed out to the track excited to see how the NT18 ran. True to his words, the NT18 felt like a 1/10-scale sedan in all aspects—it was just smaller. On the eighty-foot straight it was pretty fast and quick for such a small car. Coming into the sweeper it stuck well and hardly had any push. Through the "S" turns it was razor sharp, and it was surprising how quick and agile the steering was. The great part of this is that the car's setup was all factory specs. We did no tuning to it at all, nor does it need it! The engine had good power and is very linear, thanks in part to the aluminum clutch shoes. One trait that both of us liked are the sounds the NT18 would make under hard acceleration out of the corners. The wheels would chatter a little and it sounded like an F-1 leaving the corners. This just added to the day of fun we had testing the NT18, and we left the track with smiles on our faces. The Xray was an

## YOU NEED A MICRO STARTER BOX!

Regardless of what you have now, you need this starter box. Hudy makes this neat micro box for 1/18-scale nitro cars and with its 540 motor it has plenty of punch to start the .8cc engine with no problem—heck, it would start a .21 for that matter. Seriously, this is something you will need for your Mini 1/18 and for the price of around \$79, it will be the last starter box you'll need. This thing is built tough! We used the new Mega Tech 4100 stick pack to power this baby and it lasted all day and had plenty of punch. It has a cool factor of ten!



amazing piece of machinery. How could such a little car feel so good? We hardly had to do anything as far as tuning, and it performed all of its duties well.

## WHAT WOULD WE CHANGE?

For the price of the kit and what comes with it, there is not a whole lot to change! We would recommend Xray spec the car with rubber tires instead of foam tires; this is a great spec, but for most users, this sedan will be for playing, and the foam tires wear out quickly, but give you oh-so-good traction! The shocks are good and work fine, but they are held together by the suspension arms and lower shock mount. It is possible for the shocks to pop out on a hard impact, and it would result in shock parts flying all over the place. Although we did not encounter this, re-build-type shocks would be better. The micro servos needs to be looked at as well; one of our servos was not performing correctly half way into our test and after further investigation, we found other drivers who had experienced the same thing. This could be due to a production problem, but a call to Xray erased our problems with happy service tech telling us that we could send it in for repair or replacement. If you have any similar problems they will be happy to help you as well. Other than our nit-picking, the NT18 is a stellar package no matter how you slice it. ☐



The NT18 flywheel and clutch are tiny compared to a 1/8-scale clutch.

## TEST SETUP

**Test track:** Hot Rod hobbies

**Track condition:** 1/10-scale on-road track, smooth asphalt, and for once—sunny Southern California conditions!

**Setup we used:** Used recommended base setup, the kit only has options for shock position.

## PERFORMANCE TESTING

Charles "Hippy" Charron and I were charged with the heavy burden (yeah, right!) of testing the little guy out, and this made for an interesting Odd couple. Hippy is a Team Elitist, where I just like to have fun. For once we agreed on something and decided that since the NT18 has foam tires we should go to the Hot Rod Hobby on-road track to do our testing. This track is a 1/10 scale on-road course and has a fine grain asphalt surface—perfect for such a small car. This would really bring out the performance aspect of the

Currently the NT18 has no rivals, except for its 1/18-scale electric brothers, but we're sure that after people get a taste of this car, that will change quickly. We can't wait for more people to get some so we can start racing on Tuesday night at Hot Rod's, because this little car is a blast and a performer. We predict that by the end of the year there will be a 1/18-Nitro class springing up at a club near you. To extract the most enjoyment from your NT18 we suggest you drive it on smooth asphalt, or concrete; the NT18 is slow slung and on rough pavement it bounces around a little, but it's still fun to drive. Now run out to the hobby shop near you and get one so we can pull trigger!

## ON THE OTHER HAND...

**Stephen:** Not being a huge fan of micro "mini" RC cars, I gotta admit I'm smitten with the nitro Xray MT18 sedan. Just when I thought a real two-stroke couldn't get any smaller, the little 0.8cc micro mill comes onto the scene and runs as reliably as any larger .12 or .21 engine. From the speed to the tiny little exhaust smoke trail, the Xray makes me smile every time I see it or drive it. Now I'm wishing I had one to play around with. Hey, wait, why the heck did I assign this car to Skinny?!

**Collins:** After just a quick glance at all of the parts in the NT18 box, I already knew that Xray has a winner on their hands. Just the size puts a smile on your face, but mix that with nitro-methane, and a micro starter box, your smile quickly turns into an expression of "it's on." Yup, Xray has finally answered the long awaited question of a nitro micro vehicle, and their answer earned them the center of the stage. Brian can rest assured that when he is not looking, the car may just happen to end up on my desk.



## SPECS

Vehicle: XRAY NT18

**Type:** 1/18 scale nitro touring sedan

**Price:** \$310 (MSRP) \$299 (street)

**Class Rivals:** None—it's the first ever 1/18-scale nitro sedan!

But for now, rivals would be any 1/18-scale electric sedan on the market, and even some 1/10-scale sedans.

## DIMENSIONS

Sway bars:.....None included (optional)

**Drivetrain:** 4WD. Aluminum shaft drive

Differentials: ..... Gear type front &amp; rear

**Bearings:**.....Metal shielded bearings thoughtout (22 total)

**Camber:** .....Preset -1 (front & rear)

Front Toe: .....Out .5 (adjustable option)

Rear Toe: ..... In 4 (adjustable option)

Down-stops: ..... Adjustable front & rear

Engine: 8cc Nitro two-stroke engine  
Fuel tank capacity: 22

Fuel tank capacity: ..... 30 cc  
Chassis: ..... Pan chassis, modified

7075-T6 aluminum 1.5mm thick

**Suspension:** ..... Independent double wishbone

\_\_\_\_\_

**Damping:**..... Coil Over spring, plastic shocks, with adjustable positions, no oil damping.

**Brakes:** .....Laser cut, hand ground, single rotor,  
with Ferodo brake pads

**Tires:** .....Pre-mounted foam tires on six-spoke plastic rims

**Front width:** ..... 3.85 – 3.97 in (98–101mm)

**Rear width:**.....4.09 – 4.21 in (104-107mm)

**Wheelbase:** ..... 5.90 in (150mm)

Length: .....9.48 in (241mm)

**Ride-height:**.....0.118 – 0.157 in (3 – 4mm)

**Weight:** ..... 530g (approx.)

## ENGINE

- Internal combustion two-stroke nitro power engine – .8cc
- Standard model car fuel (25 percent nitro, high oil content recommended)
- Standard glow plugs
- Large, billet, blue anodized aluminum heat sink
- Slide carburetor w/dual needle
- 2 shoe aluminum clutch
- Polished muffler
- Hudy steel 23-tooth clutch bell

## SOURCES

- **Xray, RC America**, 167 Turtle Creek Blvd. Suite C., Dallas, TX 75207; (214) 744-2400; [www.teamxray.com](http://www.teamxray.com)
- **Airtronics**, 1185 Stanford Ct., Anaheim, CA 92805, (949) 978-1895, [www.airtronics.net](http://www.airtronics.net)
- **Spektrum**, Horizon Hobby, Inc., 4105 Fieldstone Road, Champaign, IL 61822, (800) 338-4639, [www.horizonhobby.com](http://www.horizonhobby.com)
- **Byron Originals, Inc.**, P.O. Box 279, Ida Grove, IA 51445; (712) 364-3165; [www.bvornfuels.com](http://www.bvornfuels.com)