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RC THEN & NOW PG. 36

JULY 2009 ISSUE 67
$4.99
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0 09281 02450 7

WORDS: Matthew Ciechowski PHOTOS: Walter Sidas PAINT: Chewy Graphix

XRAY XII

RTR KIT

1/12 PAN CAR

AT A GLANCE

WHO MAKES IT
XRAY

WHO IT'S FOR
Everyone

HOW MUCH $270

WHAT WE LIKED

- Bladder-type shock absorber
- T-bar with multiple tweak-screw holes for additional tuning options
- XRAY quality

WHAT COULD BE IMPROVED

- Nothing

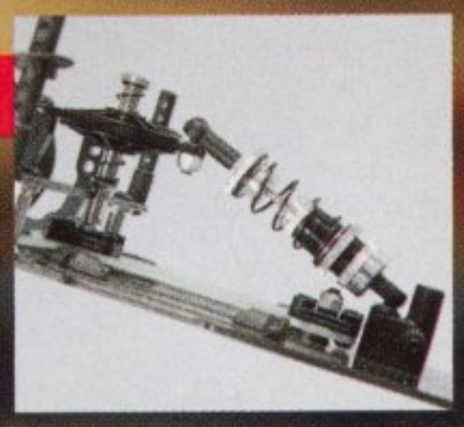
X-Factor

XRAY, after intense design work and extensive testing, now offers the potent, 1/12-scale X11 to take on the competition. It successfully debuted at the 2008 1/12-scale IFMAR ISTC Worlds in Thailand—not bad for a prototype. Now, here's the production version, and I'm dying to see how good it really is.

THE BOTTOM LINE

XRAY has produced another high-grade competitive vehicle.

DRIVEN REVIEW XRAY X11



The rear shock is a scaled-down version of Xray's popular sedan shocks. The body is hard-coated machined aluminum. Soft interior O-rings allow smooth operation without leaking. Fine threads on the cylinder allow minute preload adjustments.

The X11's front suspension is molded in strong, yet flexible, composites to withstand hard impacts. Hudy Spring Steel pivot balls are used for smooth operation.

The front end is highly adjustable—camber, caster, toe, height. What *can't* this car do?

NEEDED TO COMPLETE

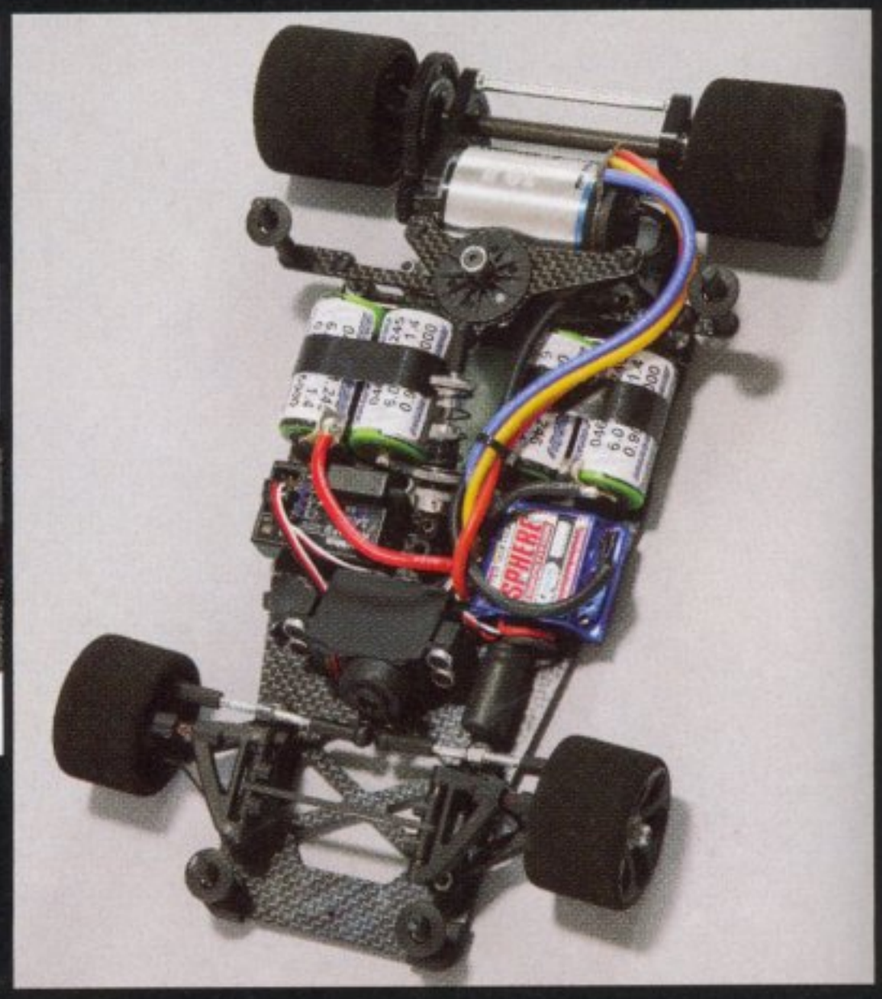
- 2-channel radio & receiver
- Midsize steering servo
- 4-cell saddle battery pack
- 540 motor
- Electronic speed control (ESC)
- CA glue
- 1/12 Lexan body
- Tires
- Pinion gear

The motor pod plates are black-anodized machined 7075 T6 aluminum. An aluminum tube acts as a brace between the plates. The pod's design keeps it light and allows the use of brushless motors, which tend to be larger than brushed motors.

WHAT WE USED

- Futaba S9650 steering servo—$65
- LRP Sphere Competition ESC—10.5 motor combo, $269
- Futaba 4PK radio w/Futaba FASST receiver—$500
- Parma Blackhawk 1/12 tires (F/R)—Lilac/yellow, $18/pair
- Parma Speed 8 HD .030 body—$19
- Team Scream Ener-G 4600 matched 4-cell pack—$40

The included T-bar can be set up in two ways to suit either new drivers or advanced drivers. Setscrews let the driver adjust tweak.



YOU NEED TO KNOW

- When designing the X11, XRAY kept brushless and brushed motors in mind. There's no problem with clearance when you install a brushless setup, and if you want to run a lighter brushed motor, you only have to install it so that the car's weight is centered. This is explained in the instructions.

- XRAY uses a micro shock that's a smaller version of its T2 platform, so no worries about the smoothness of the shock absorber's operation.

- XRAY gives you two choices of T-plate settings: one for club racing (without tweak screws) and the pro racing setup for all-out performance (using tweak screws). XRAY made sure that the X11 would suit beginners and experts.

- The differential uses high-grade carbide balls and a precision axial thrust-bearing set instead of the usual cone washer.

- XRAY's narrow chassis keeps everything close to the car's centerline.

- The X11's chassis and rear pod have drilled centerline holes to help you to perfect the balance before you race.

- The X11 comes with XRAY's signature Hudy Spring Steel parts and T6-grade aluminum parts.

- Everything is made at XRAY's state-of-the-art manufacturing facility in Slovakia in Europe.

The front end has bumpers to protect the chassis from damage and fraying. The body mounts can be adjusted in fine increments to raise and lower the body. Two servo positions are available to accommodate most popular microservos.

The graphite rear axle is precision-ground to reduce run-out. The diff plates mate with D-rings to prevent them from slipping. The black-anodized axle hubs have been machined to reduce their weight.

COMPETITORS

Team CRC Generation X, Speed Merchant Rev.5, Team Associated 12L5, Hot Bodies Cyclone 12

ACCESSORIES

XRAY aluminum active brace—372085

DIMENSIONS

- **LENGTH** 10.8 in. (276mm)
- **WIDTH** 6.65 in. (169mm)
- **WHEELBASE** 7.71 in. (196 mm)
- **WEIGHT** 29.5 oz. (840g) fully ready to race

THE LAST WORD

I'm pleased with the results of my XRAY X11 tests. It showed great handling, and top-quality parts are used throughout. The car isn't complicated, but it's a top-shelf piece that can take on the others in the 1/12-scale market. ◎

PERFORMANCE SCORECARD

TEST VENUE R/C Madness Enfield, CT
CONDITIONS Indoor high-bite Ozite carpet

STEERING

Understeer **Neutral** Oversteer

Given the low-grip tires, I'm glad to say that the TB-03D is nice and predictable. Once it starts turning, it is easy to get a feel for how much turn-in the chassis needs to keep a nice, clean drift. At higher speeds, simply turning the wheel doesn't achieve much. Setting up a drift turn required either allowing the drag brake to break the rear end loose or goosing the throttle. After that, it was smooth sliding.

BRAKING

Poor Fair **Good** Excellent

I set the LRP Sphere Comp ESC up with just a little drag brake for the RC Madness track's tighter areas; no worries about overshooting corners.

ACCELERATION

Poor Fair Good **Excellent**

The LRP Sphere comp ESC and LRP's 10.5 stock spec brushless motor had plenty of power to rocket the X11 down the straights and out of corners. The Team Scream matched battery pack also provided plenty of punch and long run times (no trouble lasting for an 8-minute race).

SUSPENSION

Poor Fair **Good** Excellent

XRAY's suspension worked flawlessly with the stock setup. After a couple of runs, I added a little front camber. The car already turned well, and I wanted to see whether I could get a little more. The X11 responded well to my change, and I was pleased with the result.

DURABILITY

Poor Fair Good **Excellent**

When you're on the track, you're bound to clip a few corners, and I ran the X11 pretty hard into the wall at the end of the front stretch after I clipped the inside of a corner. I took the X11 back to my pits and checked it for tweaks and damage. Apart from the scuff on the body, there weren't any signs of tweak or any damage. I was impressed!

LINKS

XRAY, distributed by RC America, rcamerica.com, teamxray.com

Futaba, distributed exclusively by Great Planes Model Distributors, futaba-rc.com

Parma Intl. Inc., parmapse.com

Team Scream Racing, teamscreamracing.com, teamscreammjc@msn.com

LRP Electronics, distributed by Associated Electrics Inc., rc10.com

For more information, please see our source guide on page 137.

TUNING OPTIONS

SUSPENSION

- Adjustable roll center—via washers on kingpin
- Camber—via upper suspension turnbuckle
- 3-way adjustable reactive caster—via shims and upper arm spacers
- Move battery forwards or backwards—via reversible battery mounts
- T-plate tweak screws—2 sets of holes
- Rear-pod shock preload & shock length for pod droop

DRIVETRAIN

- Gear ratio—via pinion & spur gear

MISCELLANEOUS

- Friction damper—via oils of various weights

TOOLS

TOOLS INCLUDED
None

TOOLS NEEDED
Curved Lexan scissors, 1.5, 2 hex drivers, 5.5mm nut driver, dial calipers

TIPS

- Read the instructions' supplementary sheet on building the front suspension; it shows you the sequence of tightening the front arms and setting up the front kingpins to eliminate any chance of binding.
- To lubricate the friction damper, just use the supplied differential grease on the top pad and a drop of the supplied shock oil on the bottom pad. This will let the damper work smoothly, but it will have enough tension to control side loads.