

RAPTOR NITRO MONSTER TRUCK • XRAY M18T

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X-ray M18T

The competition in the 1:18 truck class is hotting up! First Losi, then Associated and now X-Ray enters the fray to take the American giants head on at their own game. Does the baby X-Ray cut it against the others? PETER JOYCE finds out.

Hot off the back of driving a Losi Mini-T with all the trimmings (see next issue for the saga), it was going to be interesting to see how well the X-Ray stacked up in standard form.

A building we will go

One thing straight away sets the X-Ray apart from the others—you have to build it.

We love building X-Ray kits, the last one we built was the 1:8 XB8R nitro buggy, now we take on the smallest X-Ray off roader.

X-Ray are very good at producing easy to follow instructions, the ones supplied with the M18T are in the same vein as the all the other X-Ray instructions—3D CAD drawings make up the back bone of the instructions.

All the parts are in appropriately labelled bags and no parts were missing nor was any hand finishing needed making the M18T a very nice build it yourself kit.

Like many four wheel drive buggies, the diffs form the central plank of the structure.

All the suspension arms

mount on them and that is where the job starts.

Once the diff assemblies are completed, the rear is loaded on the chassis followed by the front.

The only trick to the build is the orientation of the upper arms, particularly the front set.

Keep the 'X-Ray' marks up and you'll be in business.

To help complete the task, X-Ray provide one of their neat "Profi" screwdrivers and an allen key.

There are no special tools needed that you won't already have.

Paint is one thing you will need to complete the job, along with CA glue for the tires.

Depending on the specifications of the kit you purchase, you may need as little as a transmitter and receiver or need the full complement of electronics.

Options in the box

X-Ray offer several versions of the M18T, our version has the X-Ray Power Pack included.

The Power Pack includes a 300 sized motor, electronic speed controller, micro metal



gear servo and a 7.2v 1100mah NiMh battery.

All we had to bring to the party was a transmitter and receiver and for those, our trusty KO Propo KR302 receiver and a EX10 Helios transmitter answered our call.

Also in the box are a set of four pinions so gearing can be set to meet the needs of the track and your motor combo.

A set of dished wheels with soft pin tires provide the traction.

A traditional stadium truck body also is found in the box but needs both cutting out and painting.

The body has overspray film in place, making painting easy.

For reasons best explained for by the presence of small children and their fingers, our paint job was brought undone but for the record we used Tamiya spray cans to paint the little truck.

X-Ray also have a few extras not offered by other companies, like the registration form which allows you greater access to the comprehensive and informative X-Ray web site.

M18T

Now we hit it—have a look at the specs!

Composite chassis, ball diffs, oil shocks, four wheel drive and full bearings.

Composite diff housings protect the pre-built ball diffs and both the diffs and pinion gear run in sealed bearings.

There is no shimming required to achieve the perfect mesh between the pinion and

crown wheel. An alloy drive shaft connects the two diffs with the spur gear mounted on the input shaft to rear diff.

From the diff halves, X-Ray have used composite universal drive shafts. The drive shafts come completely unassembled but it is an easy job to complete the four of them.

The motor mount is a composite arrangement with plenty of scope for different pinion sizes.

Suspension is a critical element of any R/C machine but perhaps even more so on an off road machine.

X-Ray have designed a suspension system around a three point upper and lower links arrangement.

The camber is fixed as a result but you can bet that X-Ray spent plenty of time getting it right!

The front and rear hubs are the same but are orientated in a mirror arrangement.

This means that the toe of the rear is set by a fixed link, it's conceivable that different length links will become available to alter the rear toe.

The front toe can be altered by altering the Hudy spring steel turnbuckles.

Composite shock towers fix to the top deck.

They differ front to rear but each offers similar shock mounting positions.

The shock towers are also the body mounting location.

Finishing the suspension package are four oil filled coil over shocks.





These composite bodied shocks have the bottom seals in place.

X-Ray use very heavy 1000wt oil for dampening but to compensate, the pistons are very open.

Clips provide opportunities for ride height adjustments.

Soft coil springs are provided but are well matched to their task.

Finishing the suspension set up are front and rear sway bars.

The chassis is a complete plate of composite with mouldings and cut outs to give relief to the motor and suspension movement.

The bottom deck is complemented by an upper deck made of the same material, adding rigidity to the set up.

A large swing arm running on bearings connects to the bottom of the top deck, the steering links connect from here to the front hubs.

The tiny servo is protected by a integrated spring servo saver.

It's a fiddly thing to set up but vital on such a small servo.

When using the X-Ray Power Pack provided, the tiny reversing speed controller can be screwed to the provided location on the top deck.

Alternatively, another ESC can be taped in this location.

There is little room on the lower deck for anything other than the battery, motor and servo.

The receiver must be mounted on the servo.



Even with this arrangement be sure to give clearance for the steering swing arm.

Mini Fang

The build was a great experience and hopes were high for the drive also, X-Ray have a knack of getting things right both with the quality and performance of their machines.

Before you can get out there amongst it, the supplied battery must be cycled and that's not just charged and discharged!

The X-Ray pack requires a trickle charge for 16 hours followed by a day of rest then discharging, resting again before charging for use. We are not sure why this is but it might be an idea for you to make this task the first one after reading the instructions.

Once cycled we are away—and how!

The little M18T shoots forward with tremendous purpose.

Acceleration, even with the biggest pinion on board, is awesome.

There is no hesitation while the 300 motor spools up, just super quick powerful, confident acceleration.

The X-Ray ESC is disappointing in that there is no real

braking effect, it jumps readily into reverse.

A more purposeful braking function would be appreciated.

When you move to handling, the X-Ray is

hard to fault.

At speed on high grip surfaces it is supremely responsive to steering input.

The M18T darts about, going exactly where you point it!

On looser surfaces, like many off road vehicles, it will push under power but quickly

sorts out grip as you come off the trigger.

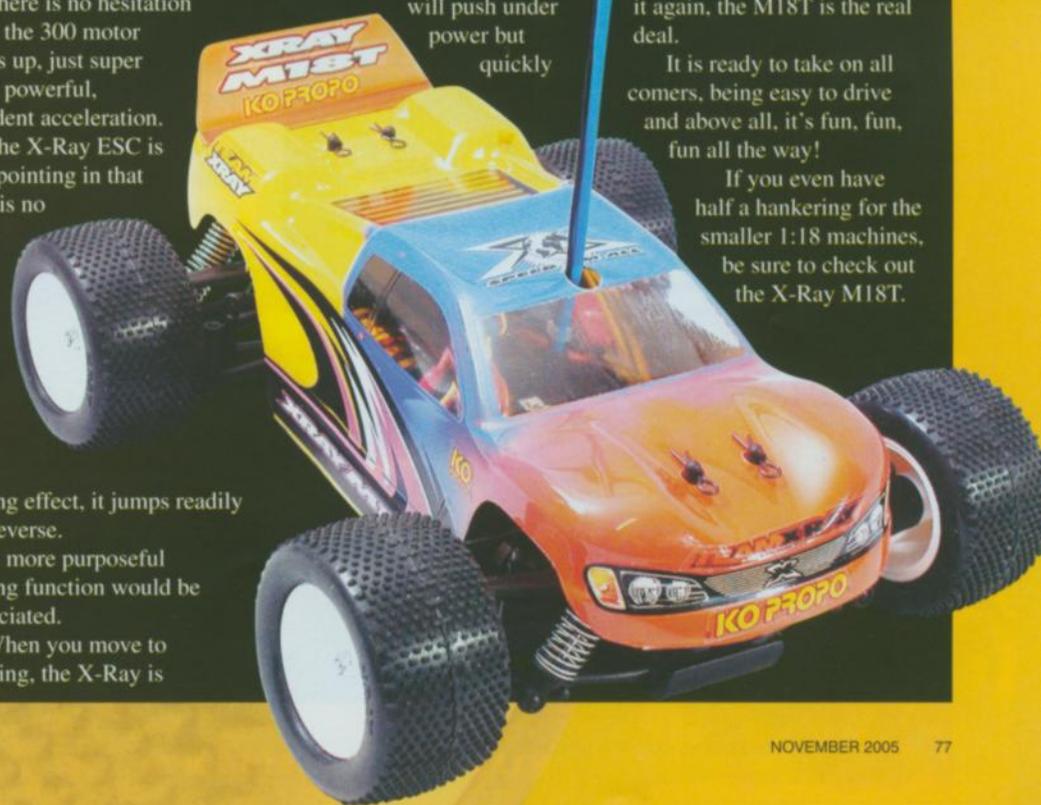
Jumping is a treat, it flies level and lands like a cat.

Now it's important to remember you're dealing with 1:18 scale—so no house jumping!

X-Ray have really done it again, the M18T is the real deal.

It is ready to take on all comers, being easy to drive and above all, it's fun, fun, fun all the way!

If you even have half a hankering for the smaller 1:18 machines, be sure to check out the X-Ray M18T.





Conclusion

X-Ray have an extremely well thought out design. It is clean and efficient.

It's very easy to drive and perhaps even easier to build.

Anyone from a first timer to an experienced hand would have little trouble building the M18T.

While it's a tough little truck and we did not bust it, still it's not one of the unbreakable 'perfect beginners' machines.

If you're starting out, there is nothing wrong with the M18T—keep clear of gutters until you get the hang of what you're doing.

With excellent driving manners and a good turn of speed, everyone will find something to put a smile on their face.

We fully recommend this little unit, it has the goods to take it to whatever comes its way.

It would make a competition machine in its class and is awesome fun to punt around.

Our thanks

Thanks to X-Ray for the M18T review car.

Custom Model Cars is the Australian agent for X-Ray.

If you would like to have a closer look at a M18T or any of the other X-Ray machines, check them out in your local hobby shop or ask them to contact Custom Model Cars for more information.

The Specs

Manufacturer
X-Ray

Model
M18T

Type
1:18 Electric 4WD
Stadium Truck

Importer
Custom Model Cars

LOA230mm
Wheelbase183mm
Track rear182mm
Track front182mm
Weight (RTR)562g

Technical

Chassis
Twin deck composite,
composite bulkheads.

Transmission
Alloy shaft drive, adjustable
ball diffs front and rear,
front and rear composite
uni-joint drive shafts, full
bearings.

Suspension
Composite shock towers,
composite bodied oil filled
'long' stroke shocks, Hudy
spring steel turnbuckles,
composite upper and lower
arms front and rear, limited
adjustments.

Motor
Supplied "Supersize" 300 size
stock motor

Gear Used
KO Propo EX-10 Helios
transmitter, KO Propo F302
receiver, X-Ray 01-MG metal
gear servo, X-ray XMC300R
ESC, X-Ray mini pin tires on
dish rims.

Battery
X-Ray 7.2v
1100mah NiMh

