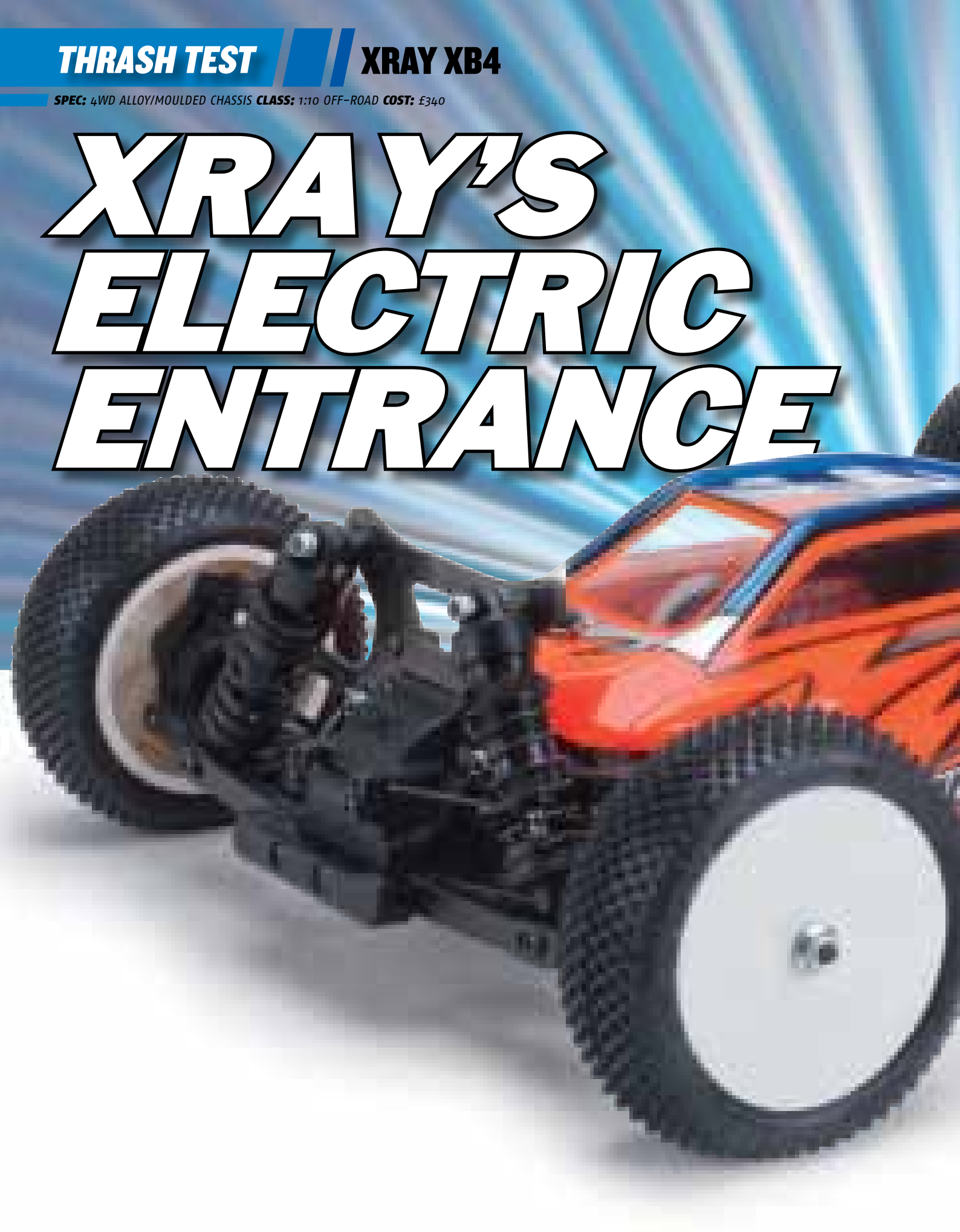
XRAY XB4

SPEC: 4WD ALLOY/MOULDED CHASSIS **CLASS:** 1:10 OFF-ROAD **COST:** £340

XRAY'S ELECTRIC ENTRANCE



Here it is, finally! Xray present their new beast to beat, the shaft drive electric off-road competition buggy dubbed the XB4. Join Racer as we build one of these eagerly awaited kits...

It's been a long time coming this little car. Perhaps one of the most hotly anticipated and worst kept secrets in RC, racers across the world have been talking about the Xray XB4 (as it is now known) for a long time with the odd piece of rumour that slipped out becoming Internet forum gold as is so often the case these days. Would the Xray be the first mainstream 1:10 car to feature a centre diff? Would the chassis be one, two or three pieces? Certainly a lot was said by racers when they saw leaked pictures, but now we have the finished car here, we can reveal the secrets and the concrete information about this innovative new car's specification.

DEVELOPMENT OVERDRIVE

What we can safely say about the Xray XB4 is that it has been subject to a lot of development. As those who follow Juraj Hudy's column in this magazine will know, Xray's new vehicles go through numerous prototypes before release to the public, sometimes using as many as ten different versions of wishbones before the team in Slovakia are happy the car is as good as they can possibly get it. So yes, one, two and three-piece chassis' were probably tested at tracks, and a centre diff may have been tried (certainly the centre drive assembly is big enough to take a diff), but the finished car does not feature a third diff, and has the expected two-piece multi-flex chassis in shipping specification. We'll save the full details for the Xray column, but suffice to say, in Xray's exhaustive testing, they found the XB4 to be as fast, or faster around tracks than their direct competition. Now whether that is true in reality, we'll have to wait until we've seen real racers use it week in and week out, but judging by how good some of their other vehicles are, we've a pretty good feeling about this car. Of course, the chassis is just one thing that wins races, the drivers and their supporting team also have a massive part to play, but with the support of RC Disco in the UK and solid sales of their first batch of kits, 2013 will certainly be an interesting season with such a high profile newcomer entering the fray.

FEATURE PACKED CHASSIS

So what are the main features of this new buggy? Essentially, the XB4 is not a revolutionary design, which some will say is a good thing. The designs out there for 4WD buggies generally fall into two main philosophies these days – the twin belt and the shaft layout. There are of course exceptions,

THRASH TEST // XRAY XB4

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"Xray's reputation in other classes has meant that the XB4 had cult appeal before it was even released!"

Geared diffs are light and easily tuned with different silicon oils

The moulded cap with bleed screw is mated to alloy shock body

Big bore oil-filled shocks come with a range of alternative pistons as standard

but most racers feel comfortable with one of the above. The XB4 falls into the latter, with a centrally mounted motor driving the front and rear wheels via two driveshafts. Nothing we haven't seen before, but the devil is in the detail with this transmission, and the detail is very good indeed! The slipper clutch is of the twin pad type, with a spring and nut allowing for full adjustment. The nut itself has a set screw integral within it and this will mean it cannot self adjust itself, but it does mean that you can only adjust in half turn increments. It is worth mentioning that all the driveshafts and the centre layshaft are made from the mystical Hudy Spring Steel; a material that has proven itself time and time again on racetracks around the world. The driveshafts themselves are similar to Xray's on-road cars and are rebuildable (including the drive pins on the dogbone) and do not require a set screw to hold them together which should ensure very long life and reliability. This central transmission is all mounted on what is perhaps the most innovative feature on the XB4 – it's Multi-Flex chassis. We've seen aluminium and plastic multi-piece chassis before of course, but the XB4 is the first to use Xray's technology that allows you to tune how much flex the chassis exhibits by altering the relationship between the plastic and the metal. By adding or removing screws that hold the aluminium to the plastic tub, you can increase or decrease flex and thereby grip on the track. If you run on a high traction track then running the chassis stiff will give you plenty of steering, but if you run on a low traction surface, then you can remove screws to soften things up and get more grip.

WHEN YOU WISH UPON A BONE

We know the chassis is clever, but what about the business ends? Well, inside the transmissions are geared diffs that are silicone filled. The kit comes with 5000 and 10000 weight oils and suggests the heavier stuff goes in the front to begin with. Depending on where you run the car, you may wish to change the oil weights, and we'd suspect lighter if anything to give more rotation at either the front or the rear. The suspension is typical of the class, with Losi-style (read now everybody) front hubs and upside down Y-hub rear suspension, both hubs featuring larger outer bearings to better support the wheel loadings they experience. peaking of bearings, these blue sealed items have to be some of the smoothest running ones we've felt recently, but don't forget to oil them as per the manual with a good quality light oil before fitting. The shock towers are made from 3mm thick excellent quality carbon fibre and offer plenty of holes for shock angle and roll centre. We went with the kit positions for build up, but as the machine gets tested over here on UK tracks, we'll no doubt start changing the set-up to better tailor it. You can read our owners panel in this article to get the low down on what racers are already thinking of the car. The shocks are again very high quality, and unlike the rumours that were circulating before the car was released, they are aluminium, and not plastic in construction (with the exception of the caps). As they feature a bleed hole, getting consistent rebound rates is very easy, and all four shocks built very consistently on our review car. One last thing worth mentioning are the inserts that are fitted to all the inner pivot points of the wishbones. These allow you to adjust anti-squat and toe angles for both front and rear quickly and simply which is a nice touch.

One of the unique features of the XB4 is the Multi-Flex system where you are able to stiffen or soften the chassis by the additon or removal of screws

Eight screws in total - four at each corner of the chassis at its widest posint and four in the middle down the centre line - can be installed or left out for different handling characteristics

Racer Tips

Two things we would recommend when building the kit are to firstly seal the edges of the carbon fibre parts with superglue in order to prevent them splitting in a crash.

We also suggest using a reamer to clean the pivot hole on the wishbones. This requires a 3mm reamer and naturally we used one from Hudy's extensive range. This will ensure the suspension moves freely and does not bind at the extremes of travel.

Slipper clutch is adjustable with the setting locked by a grub screw

Tekin R5 Pro speed control fell into place between the Savox servo and Spektrum receiver

The latest Redline Gen2 motor from Tekin is a 5.5T wind

The diff in situ. You can see the chunky front wishbones

Here you can see the exposed pinion gear - access is made by removing four screws

Moulded straps swing out for battery removal or installation

Large 14mm diameter hexes are used both front and rear

dBoots tyres were fitted to Xray's own white dished rims

THRASH TEST // XRAY XB4

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I BOUGHT ONE

Glenn Westwood is a former BRCA National Championship round winner in the touring car class and has made the switch over to 1:10 off-road. Until now, he has focussed on 2WD, but recently purchased an Xray XB4 so he could compete in 4WD. It was therefore only natural that we caught up with Glenn and asked some questions about his investment.

Racer: First of all, why did you buy an XB4?
Glenn Westwood: I had previous experience with Xray and like the brand. Before I started racing off-road, I ran the Xray touring cars successfully so an Xray buggy was a simple and logical choice.

R: What can you say about the build?
GW: It goes together so well – simple, not over-complicated – and reminds me of a touring car only bigger! The wishbones are mega strong and more like a 1:8 off-road. The manual is great and is easy to follow with its coloured drawings. Build-wise, it falls together and there is no need to fettle anything. I did lube the gears inside the gearbox as I have always done this on my cars.

R: Do you think that the car has any weaknesses?
GW: Not at all from my point of view. Of course you here stories about bits breaking but that is only natural with so many cars out there and different abilities. I will invest in some spares like gearbox tops and gears but nothing else concerns me at present.

R: What option parts did you buy and if not, what will you consider?
GW: I only intended to build the kit up over Christmas but by New Years Day I was at the track putting some laps on it! I haven't really done enough mileage as yet to consider optional items but as the XB4 comes with different pistons and anti-roll bars as standard, I only expect to get the usual things like springs.

R: What are the best thing about the XB4?
GW: The build quality is amazing and so easy to put together. I thought that it would take some time so planned just to do the first few steps one evening then before I knew it, three hours later and the car was all built. The one unique feature is the flex settings for the chassis and this I like and hope to test next time out to see how it changes the handling.

R: We are glad you mentioned handling – how was it?
GW: My first time out was at TORCH and it was very damp so maybe not the best conditions for a first run, especially as I have only done a handful of laps with a 4WD driving Lee Martin's Tamiya last year. I have to say it was brilliant! The car was really well balanced and fast too even with a mild 7.5T motor installed. I started out with the kit set-up, but just dropped the oils a little as it was cold. It carries great corner speed, which I like because of my touring car background, and jumping-wise its awesome too. I can't wait to test it at other tracks and get ready for a full season with the car.

R: Good luck Glenn and thanks for taking the time to speak with us.

Xray's quality is second to none with a perfect fit and finish

The top deck only braces the front of the XB4 chassis

There are two options for the steering Ackermann angle. Anti-roll bars front and rear are standard

SPECIFICATION

Model:	Xray XB4
Scale:	1:10
Class:	Off-Road
Application:	Competition
Format:	Kit
Power:	Electric
Chassis:	Moulded plastic/alloy
Drivetrain:	4WD
Transmission:	Shaft
Differentials:	Gear
Shocks:	Oil-filled/threaded bodies
Bearings/Bushes:	Bearings

TECHNICAL DATA

LENGTH:	352MM
WIDTH:	245-250MM
WHEELBASE:	279-281MM
WEIGHT:	1650G

WHAT WE USED - Electric Kit Kit

TRANSMITTER:	FUTABA 3VCS
RECEIVER:	SPEKTRUM MICRO SR3500
SERVO:	SAVOX SC-1258TG
SPEEDO:	TEKIN RS PRO
MOTOR:	TEKIN REDLINE GEN 2 5.5T
BATTERY:	GM 7.4V LIPO
TYRES:	DBOOTS TERRABYTE

VERDICT

Fabulous quality / Easy to build
Easy to work on

14mm hex wheel fitting

RACER RATING

★★★★½

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QUALITY ABOUND

When building this kit, the overall feeling we got was of extremely high quality, and very well thought out design. It sometimes amazes that Xray can engineer in the kind of quality they do (which really is second to none) for the price that is competitive with its main alternatives. All throughout the car are touches of loveliness, from the little screws that keep the battery and motor wires in place in the chassis, to the diffs that come out with just four screws. Even the battery hold downs are nice and mean you can actually get the batteries out without disassembling half the car every time. Electronics installation was surprisingly easy for a competition kit and our Tekin RS Pro slipped in with plenty of space for the (albeit small) Spektrum receiver.

Body wise, Xray have gone with a cab forward design that has become de rigueur in of-road but have managed to make it unique with the rear section sloping back rather than making the cab appear boxy. A large rear wing compliments the body and both were painted by David Holmes at Custom Graphix, based on the design of Xray's Martin Bayer, their current 1:10 off-road leading driver.

FINAL THOUGHTS

It is sometimes a hard thing to take the leap of faith needed with brand new kit on the market, but we've a really good feeling with this new Xray. The company's experience with touring cars means they are of course a trusted name, and the quality of this kit is without doubt. It is also similar enough in construction to other cars already out there to not put people off, so we think it will be popular with club and regional racers. Perhaps the biggest challenge Xray will have is to attract the drivers at the top of the class who generally want a two and four-wheel drive machine to run from the same manufacturer. Depending on how well received the XB4 is, this will no doubt influence the company's decision to produce a two-wheel machine. Let the rumour mill commence we say!

With very limited time to get the XB4 into the magazine after its released in late 2012, our apologies for not being able to get to the track to test the car so instead, take a look at our separate panel where we talk to a new owner.

SUMMARY

Xray have delivered their new car to beat. Track success will be dependant on getting the right hands behind the sticks driving it, but this is a car that is easy to build, drive and live with and we can definitely see it mirroring Xray's enviable reputation in the touring car class.