

# my mate Miata

## HPI RS4 Mini Pro review



Car works well on tarmac or carpet

### What's a Mini Pro then?

When we were asked to review the HPI RS4 mini-Pro we expected it to be a basic run of the mill kit in the shape of a mini. However, when the box arrived we were pleasantly surprised as this was a top of the range RS4 mini PRO with many option parts including graphite



of these on it. Personally I think that the body looks good without any wing at the rear but this may effect the handling of the car later on and maybe the big wing could be added later to balance the effects of a short wheelbase.

The kit also includes many parts to make the full size RS4 and some for the Nitro RS4, so it is worth checking the parts carefully before assembly. If you prefer to cut off all of the needless parts before building, the first page of the manual shows which parts are needed for this kit and which ones can be removed (but not thrown away) as some parts, for example the chassis mounted belt tensioner can be added later. Indeed, because of the number of parts remaining upon completion of construction, you could be forgiven for thinking that there is still another car to build or you have dramatically forgotten to assemble it properly.

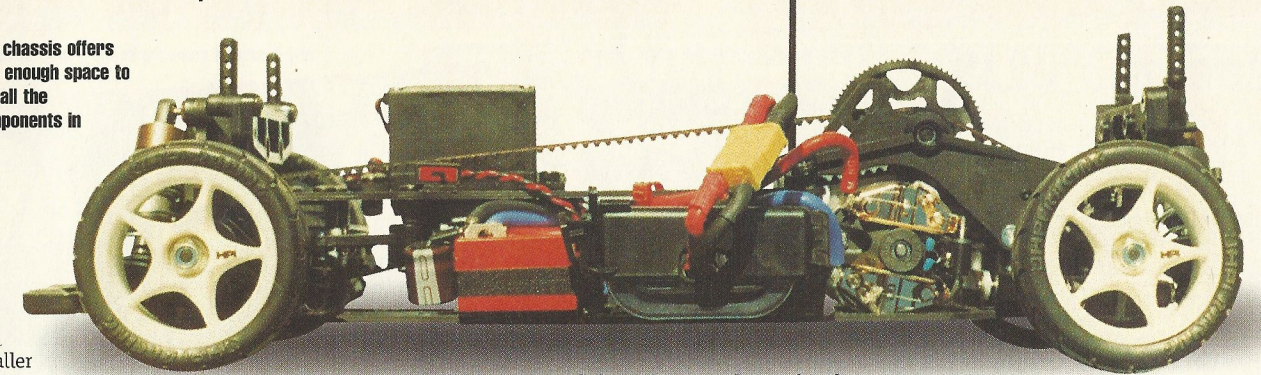
The instructions are for 208mm or 225mm wheelbase so it's worth checking the small print on the side of the box and again at the rear end of the body to see which size body you have which corresponds to the separate pages of the instruction manual. If you choose a different,

chassis,

graphite upper deck, front and rear ball diffs, universal dog-bones all round, full bearing set, belt tensioner, oil filled shocks and making their first appearance in an HPI kit, Mini-sized X-Pattern Belted radials in a new compound. It also came with the Mazda Miata (No we hadn't heard of that model either) Roadster known to us as the new MX5. The body included a rather oversized wing and a sporty boot mounted mini wing, although the road going version doesn't have either

'this is a pure racer and one which is sure to raise a few eyebrows'

The chassis offers just enough space to get all the components in



smaller

body at a later stage such as the HPI Suzuki Wagon R or a Tamiya Mini body then you will need to reverse the lower rear wishbones and replace the mounting posts and, hey presto a new wheelbase car. The overall length is just 305mm (345mm with body). Width is about 160mm and a height of just 100mm making it around 2/3 the size of a scale saloon.

### Manual Labour

The manual is clearly laid out and makes construction fairly straightforward once you have worked out which parts are for your car and which are the spare pieces for the different models. Parts are separated in clearly marked bags although a few are in bags where you would probably not expect them to be. For example the bag which is labelled 'Open this bag first' is not needed until the third section of construction! It also contains the graphite chassis together with the friction plates for the diff for some strange reason. Once you have decided which bag goes where the construction is fairly straightforward. The plastic parts are well made and the flashes on most parts come off cleanly without the need to file. The kit supplies Allen keys, wrench and grease for the diffs together with what looks like lightweight oil for the shocks, probably around 30 weight. This may need adjusting later on after some testing. The shocks also have a choice of five different teflon coated pistons each with different size holes. Moulded camber links are included in the kit for race tuning although on the front this only gives you a choice of two settings.

The only other items that you are likely to need should all be in your toolbox anyway including super glue which wasn't in ours. (Isn't it strange how a tube of super glue looks full until you go to use it and all you get is wind!) Remember to make a note of which are front and which are rear shocks as these are made first and then put to one side until later. The shocks are built slightly differently front and rear with both having plastic limiters on them and different amounts of spacers in the springs. If you get these mixed up you could

The Miata is a good looking shell

have a very unbalanced car on the track! Also a point to note at this stage is that the rear shock tower shown on the packaging is a prototype and is different than the production one in the kit.

### Little Belters

The radial belted tyres look really good and another good point is that the foam inserts are in one piece so that there is no need to glue the ends together first and no chance of them parting after you have glued the tires on leaving a nasty flat spot on one side and a bump on the other side. Although there is a cover to the front diffs the rear diffs are fully exposed even though the mouldings seem to be made for one with four holes ready for the roll bar to be screwed into it. The dual belt system looks robust and practical and comes with adjustable belt tensioner for the front belt and a useful tensioner for the rear which is situated on the diff housing and is marked with notches to enable you to make fine adjustment. The diff carriers have corresponding notches on it so don't cut them off thinking that they are moulding flashes.

Like most kit bodies today it is covered with film to prevent overspray. No window masks on this kit which we think is more necessary than some of the decals included with the body of which most are never used anyway. You may have to make your own masks out of masking tape but HPI tell us that masks will be included in future.

Another point to make before we started to paint is that the dimples on the body for the mounting posts are very slightly out of line, so its worth positioning and drilling the old fashioned 'turtle' way.

We decided to paint this one blue and silver rather than the dull grey which appears on the packaging mainly because it looks good and saves you a fortune on buying four or five cans of paint!

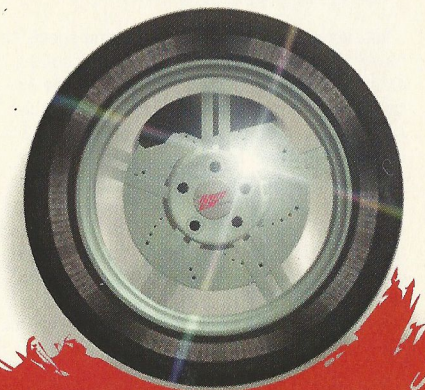
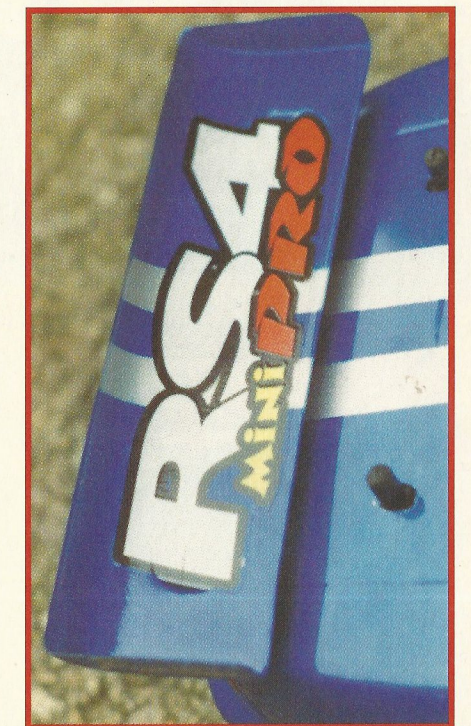
The completed car looks great and is true to scale. (Is it me or are all these cars getting smaller?) Remember when we thought wide bodied saloons looked good then along came scale saloons then compacts and now minis. What next?

Mirage Enterprises kindly loaned us the Batteries, Motor and Speed Controller. It is worth testing to see if you can fit everything in before attempting to stick it all down. The one problem with making cars smaller is the fact that space is also becoming reduced to mount your gear. We chose a Novak Atom ESC because it was one of the few that would fit properly in the designated space, if you choose one of the larger speed controls with heat sinks it may need to be mounted on the top plate along with the receiver.

### How did it go?

On a bright warm afternoon we took the car out to the track and after a pre race check to find out that everything was secure Alex then took it on a warm up lap to check the trimming etc. At this stage we knew that the car is very responsive and the short wheelbase means that the steering is somewhat quick, even with a standard servo. The acceleration is tremendous even with the Orion Orbital 16T which we had fitted. It does however require a delicate touch on the accelerator as the car could easily spin out unless the power is applied gradually.

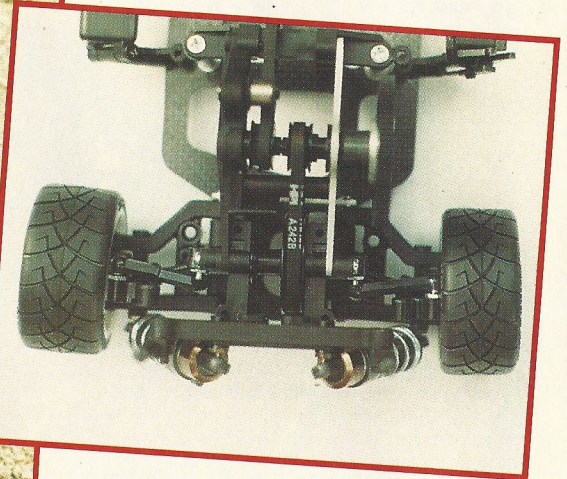
Large rear wing for stability



Simple but effective 'retro' paint job



Tidy rear end shows a healthy dose of toe in



## Conclusion

Our overall conclusion on this car is that it is easy to build (about 4-5 hours) excellent to display and after a little practise, easy to drive. Unfortunately this car is not eligible for the forthcoming RRCi/HPI series in 1999 due to the fact that the standard RS4 Mini will run in its place and costs only half the price of this kit which retails for approx. £230. This kit will however have its own class for indoor racing and will also have a suitable class in the Ashby Winter Series. Make no mistake this is a pure racer and one which is sure to raise a few eyebrows when mixing it with other cars of this scale. If you want to see it race, then Alex will be racing this actual car in the Ashby Winter Series and we will be keeping you informed of how it competes.

**RRCi**

## Quick Spec

1/10th Scale Touring Car. 4WD dual belt system.  
208 or 225 mm wheelbase.  
Graphite chassis, upper deck  
Front and rear ball diffs  
Universal dogbones all round  
Full bearing set  
Belt tensioner  
Oil filled shocks

## Testers Kit

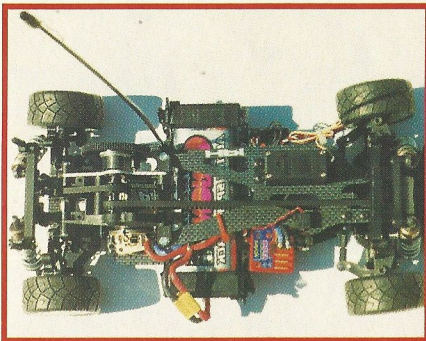
Mirage/Orion cells  
Novak Atom Speed Controller  
Orion Motor - 16T Triple

## Likes:

Quality  
Specification  
Performance

## Dislikes:

Cannot race it in the RRCi/HPI series in '99!



Rolling chassis shows this is a Pro touring car, but smaller

As Alex gradually built up to racing speed he found the handling was excellent particularly on Ashby's infield and especially through the chicanes. Straightline speed on the main straight at Ashby was the most tricky part because with a car as sensitive as this then concentration is required even during the time on the straight. The driving style for this type of car is certainly different to anything else where as the tendency to jam on the power results in you facing the wrong way down the track. Braking is a new experience finding that under braking the wheels tended to lock up we may have you may have to turn maximum brakes down to stop this.

We expected the car to be very quiet but found that it was slightly noisier than expected. This is probably due to the fact that it uses 48 pitch gears and I'm sure that a 64 pitch option would cure this as well as giving you more options for gearing especially with these smaller wheels. We were not able to record any time but we do know that it appears as quick as any other scale saloon we have driven around Ashby.

Whilst we were at Ashby we decided to take it for a run on the indoor carpet track and found it to be very quick even with the kit gearing of a 31 pinion. The tyres were a little slippy but made for some very realistic slides when negotiating the hoses and other drivers on the 'green baize'. The size of this car should make it ideal for anyone considering a new car for indoors. After close examination on our return home we found that with a light dusting off the car returned to showroom condition and not one screw had come loose. The belt had loosened itself from our build specification and we're sure that the belt tensioner would probably be required after a few meetings. An inspection of the chassis revealed no scratches which shows that even this car still rides the track very cleanly with the kit set-up. The 'tweak' screws which allow you alter the ride height were not used and we would only recommend using these if you are racing on a very smooth surface like carpet as the screws limit the amount of drop the suspension has.