

BY PETER GRAY



POCKET MONEY MACHINE

Carisma M14 Porsche 997 GT3, 1/14th Scale RTR

Here at RRCi we always review the latest in cutting edge R/C technology and could all too easily forget the actual cost of the cars we are reviewing. How often do we think about the depths of our readers' pockets and how it would feel to walk into a model shop and part with our own cash to purchase our very first R/C car? It was time to be humbled and learn a lesson in value for money R/C.

TV programmes like the BBC's excellent 'Top Gear' often give presenters an amount to spend on a car to partake in a challenge set by the producers. Well in true RRCi style I've been given a budget by Dez of only £60 and told to get the best 'bang for buck' possible. In an age where drivers think nothing of spending £60 or more on tyres for a weekend of racing, what in reality can sixty beer tokens buy you in 2009?

I searched UK online retailers and found that most 'real' hobby grade R/C cars start at around the £100 mark for even a basic RTR. Sure, there are much cheaper 'Toy Grade' R/C cars out there, they look the part but deliver very little in the way of performance and spares are impossible to get hold of, so I ruled them out. I then rang my nearest model shop and they suggested I take a look at the 1/14th scale 2WD Carisma Porsche RTR from CML. At first the Carisma looks like a toy, but looks can be very deceiving and as I soon learnt the Carisma is both a real R/C car and has the ability to be tuned-up in the future with a stunning range of option parts on offer.

AT LAST A REAL RTR!

Not only does the Carisma come in under my budget set by Dez, but it is possibly the only RTR car I've ever reviewed that was truly ready to

run. The box contains not only the car, a 27 MHz wheel transmitter, 7.2 V rechargeable 700 mAh NiMH battery pack and wall charger but even the 8 AA cells for the transmitter, now that's value for money if ever I saw it! Sold to the man with bleached spiky hair!

I took my new acquisition home and opened the box to see what the Carisma was made of. Plastic mostly, sure, but well designed plastic at that. The chassis looks modular and there are so many mounting positions for the sub assemblies that it must be the basis of many variations in the M14 range. The sub assemblies can be mounted in various positions to lengthen or shorten the wheelbase and the body mounts have a variety of possible locations to suit different shells including road cars like the BMW Mini and Nissan GTR, to super cars like Mercedes and Ferraris, even rally cars including the Subaru Golf, Mitsubishi and Focus. With ten very different models in the range the world is your oyster, and even the 1/14th shells and wheel sets are available separately so you can swap and change as you feel the need.

The Porsche we have on test falls under the race car division, strangely enough, and the shell is pre-painted and stickered, a very realistic scale representation of a 977 GT3. Even the wheels are scale replicas of the GT3's alloys with a two-tone affect to compliment the body. The rubber tyres are pre-glued and are a soft compound rubber moulded with a realistic tread pattern. All in all 10/10 for appearance! It's hard to resist the temptation to treat it as a shelf queen, but this R/C car is designed to be used and enjoyed, not gather dust so let's get out and drive it.

Removing the shell reveals a standard looking 27 MHz receiver and ESC combined together in one multifunction unit. The interchangeable crystals mean up to six Carisma's can be run against each other using this



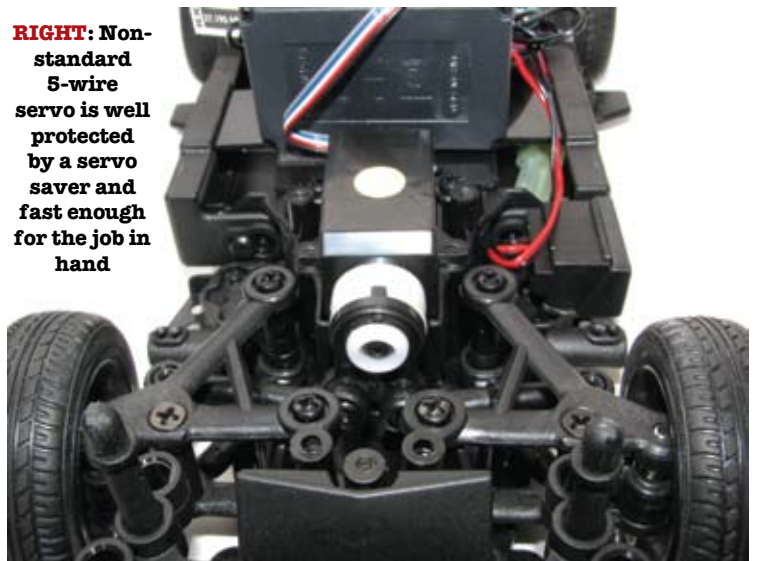
standard radio equipment, so make sure your friends buy one on a different frequency if you intend challenging them to a race in the car park at lunch time! The steering servo is a high speed Carisma specific unit, fitted with a large servo saver. Its connector has a 5-wire ribbon cable and specific connector instead of the usual 3-strand cable and connector found on a standard servo. Don't let this put you off though as the servo works really well and is quick enough for this 2WD chassis and 380 motor.

UPGRADE AS YOUR CONFIDENCE GROWS

A really nice surprise was the standard servo socket on the receiver, right next to the connection for the steering servo, allowing the use of a standard upgrade servo in the future if you outgrow or damage the standard unit. Considering that I usually spend about £60 for each servo on my buggy/truggy or crawler builds I can't really fault the servo fitted!

The steering and suspension doesn't allow geometry changes in camber or caster, but does boast simple sprung front suspension to soak up the bumps, but still stiff enough not to affect the positive steering response or handling in corners. This is similar to the simple front suspension on a certain British made car that's run every week at clubs all over the UK. This is most definitely the best way to go

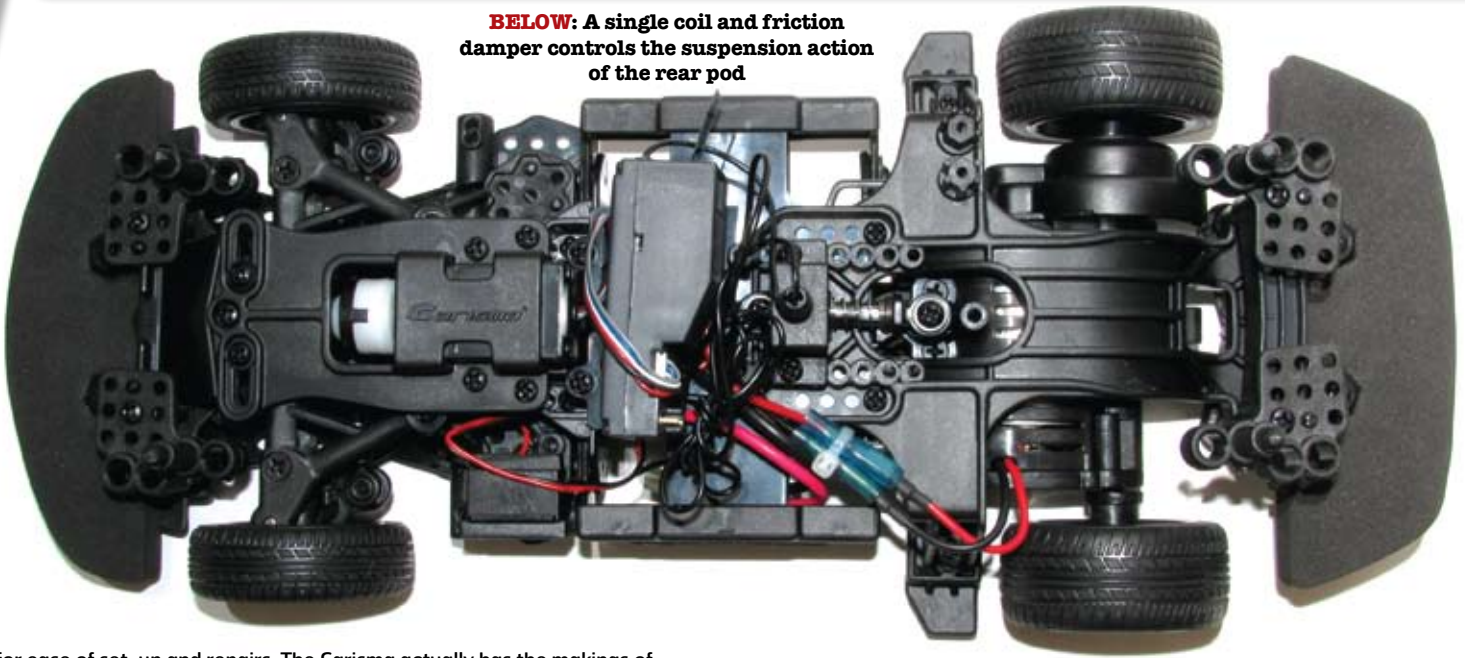
RIGHT: Non-standard 5-wire servo is well protected by a servo saver and fast enough for the job in hand



RIGHT: The M14 chassis is versatile and allows variations in wheelbase and shell type



BELOW: A single coil and friction damper controls the suspension action of the rear pod



for ease of set-up and repairs. The Carisma actually has the makings of a really good entry-level class that would be perfect for indoor racing on carpet or even in school halls like I first raced in the after-school club in the '80s! The more I delved into the Carisma the more sense it made and the better value for money it became. The front wheels rotate on plastic bushes that again can be upgraded to bearings if the mood takes you, to improve efficiency, keep the rotating parts in good working order for longer and sharpen the handling by keeping the wheels in line more accurately.

The front end is finished with a securely mounted foam bumper to soak up the shunts once you inevitably start mixing it up with other M14 drivers at your local club. If like me you're happy ragging it around a local car park, the lounge or anywhere nearby with enough space, it will also soak up the odd mishap!

2WD POD RACER

The rear of the car is designed as a floating pod with one spring and friction damper running along the centre of the backbone. This design works perfectly on this 2WD chassis and is a reflection of the design of current 1/12th circuit cars albeit not as sophisticated. The pod itself houses the rear axle assembly, a planetary geared differential and main spur gear, pinion and motor.

Removing the wheels, the rear pod unscrews easily allowing the plastic drive hex and axle bushes to be removed and the axle stripped. The planetary diff uses three plastic gears rotating around a larger ring gear with a smooth action that can be fine-tuned by the addition of



The simple spring front suspension works fine in this application, and wheels rotate on plastic bushes

BELOW: Note the multiple body post locations and various sub assembly positions to suit different wheelbase versions





ABOVE: Pin drive plastic hexes ensure the rear wheels are fixed securely to the rear axle



ABOVE: The floating rear pod takes its influences from 1/12th on road racing



Motor-mesh can be adjusted in seconds and uses a standard 48DP pinion and spur



viscous grease on the gears and by adjusting the tightness of the wheel nuts when re-assembling the axle. Again in the future you can replace this with a ball-diff and a full bearing set to reduce drag and make the driveline more efficient as and when your budget allows.

The supplied brushed motor is a 'Sport' 380 can and will allow the end user to upgrade to the Carisma 'racing motor' in the future. Any 380-sized motor of choice will fit but going brushless would definitely require the upgraded diff, bearings, tyres, battery pack etc., which would see you spend potentially twice what a car would cost in the first place, but you can do it piece by piece over time rather than shell out for it all in one go, which is the beauty of a proper race car over a plastic play thing in the toy category.

The 700 mAh NiMH battery took just over 2 hours to charge with the included wall charger and came off slightly warm, which is always a good indication it was near peak capacity. For its size the rating is quite small and gave ten minutes of runtime on my first test, but this could easily be swapped out for the upgraded Carisma 1250 mAh battery if you need more run time. The pack is secured in a plastic cage that has a locking mechanism at each end to hold it securely. I like this feature, although all the plastic involved adds weight, everything fits together neatly and is protected.

VFM, TAIL HAPPY FUN...

I took the Carisma to a local car park with a couple of friends and a selection of other 2WD and 4WD cars mostly costing many times that of the M14, but one thing that became clear was that this little car could move when it wanted to! Keeping up with them most of the time, but without the real top end grunt you'd need in a bigger area.

RIGHT: The plastic planetary diff action can be tuned by the addition of viscous grease



Its all up weight is 1.7 lb, and even though the ESC isn't as progressive as some units costing more than this whole car that I've become used to, it works really well. It helped propel the car to a top speed of around 25 mph, a scale speed of 350 mph! I was mixing it up with the other small scale cars and having loads of fun in the process, my only criticism was that the included battery doesn't last that long, especially when running at full throttle most of the time. I wanted more, and didn't want to stop because I was having so much fun.

The tyres work really well on asphalt but like any 2WD car it can be a real handful, demanding a sensitive driving style and that was half the fun! I could go from under-steer on the power, to tail happy lift off over-steer just like a real rear wheel drive Porsche on a slightly dusty section of our car park racetrack, so that's where I headed time after time, hilarious!

All in all the Carisma takes you back to basics, in a way that reminded me that we all share a common interest in this hobby, namely our love of cars, speed, driving and most of all fun. I take for granted that the latest bit of high-end kit will perform well, but I have been left disappointed by cars costing ten times the cost of this M14 Carisma.

This is by far the best way I can think of spending just £60 to get into R/C, as the Carisma M14 completely exceeded my expectations. I'm actually going to use this car to introduce my eight-year-old nephew to the hobby and teach him some R/C basics. To him it's an amazing looking Porsche and his first R/C car. To me, it represents great value for money and has taught me to be more open-minded in my views and more appreciative of the pleasures that an entry-level car can offer. **RRCi**



ABOVE: The 27 MHz receiver/ESC combo is future-proof, allowing the use of a standard 3-wire servo to replace the 5-wire unit fitted

QUICK SPEC

Class: 2WD 1/14th Scale On Road
Type: RTR Electric
Manufacturer: Carisma
Price: £58.99 RRP

REQUIRED TO COMPLETE
Nothing!

DISLIKES
No camber or caster adjustment
Short run time with kit battery

LIKES
Cost-effective R/C fun
Detailed and realistic shell
Working planetary diff
Real 2WD Porsche style driving
Tune up parts available

CONTACT

CML Distribution
01527 575349
or
www.cmldistribution.co.uk



LEFT: At last a real RTR, absolutely everything you require is included in one box!