

# PRO 10



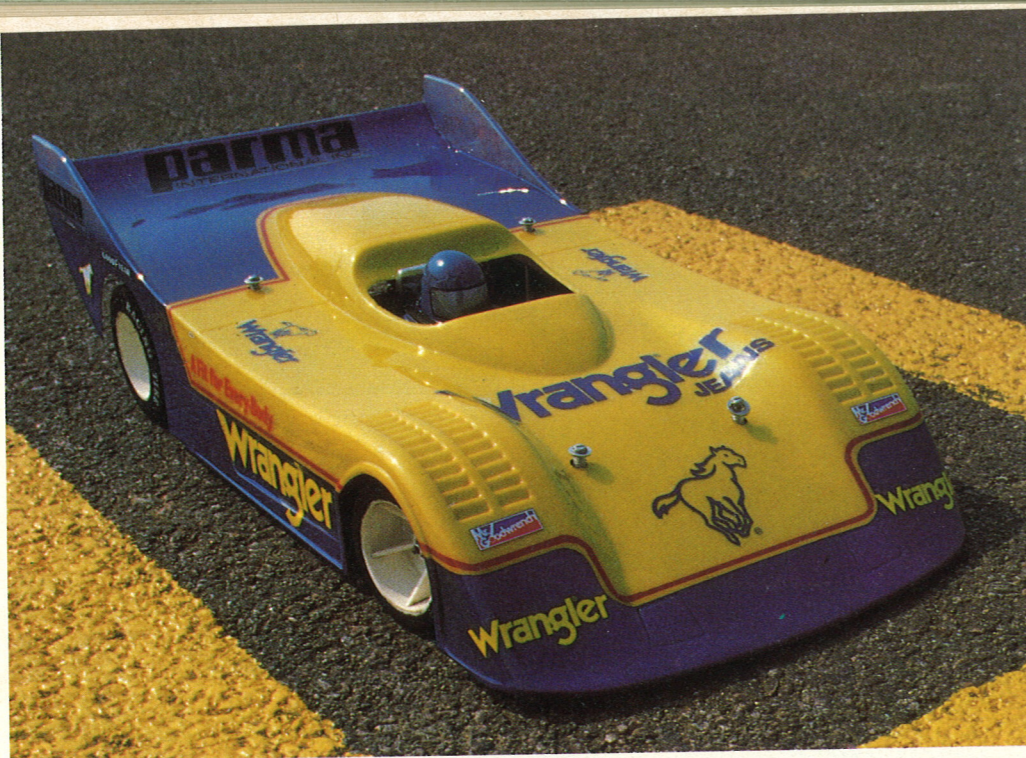
Model Cars has  
been 1:10th on  
road with  
Parma's PRO 10

**B**e prepared race fans for yet another new and exciting form of electric car racing is about to hit these shores from the States.

Hot from 47mph average lap times at the Lake Whiporwhil Speedway, Orlando, Florida 1/10th scale on-road stock car racing is the answer for anyone considering a change from conventional buggy racing.

On-road racing, on either oval or circuit tracks is growing so rapidly in popularity that the US governing body ROAR will be making it an established class of racing shortly. In the meantime manufacturers are rushing out new cars and products in an attempt to satisfy demand.

The aforementioned Lake Whiporwhil Speedway is at present **THE** place to be as shown by two recent events the 'Grand National Stock Car Championship' and 'Radio Control Car Action Weekend'. Both meetings were heavily over-subscribed for entries whilst factory teams debuted new cars to snatch top honours. The raceway itself is a scaled down replica of the Daytona Beach oval circuit complete with 33° banked bends. At the Grand Nationals the Novak 500 race for ten invited factory teams featured four man teams (two driving, two pit crew) racing for 500 laps of the oval! At average speeds of 47 mph the racing was a real test concentration and guts.



The almost instant appeal of this type of racing stateside has been sparked off by the Americans fanatical interest in one of the largest spectator sports in the World - NASCAR Stock Car Racing. By comparison Americans consider Formula 1 to be a mere sideshow to the real excitement, drama and visual splendour of such races as Daytona Beach and the Indianapolis 500.

Stock Car racing, 1/10th scale, emulates as far as possible the incredibly close, high speed racing that the full size NASCAR scene embodies. To this end oval tracks as well as 1/8th scale gas tracks are eagerly being pressed into service to meet the demand. British racers on visits to the US over the last 12 months have only word to describe the 1/10th scale on-road scene... AWESOME!

Back at Lake Whiporwhil and one of those new cars on show for the very first time was the 'Pro-Panther 10' from Parma International Inc. of Cleveland, Ohio. Designed and developed by Andy Dobson the 'Pro-10' is in very simple terms an overgrown 1/12th scale car as the technology involved is virtually identical. Those of you who read Keith Helmke's excellent review of the Parma 'Pro-12' in the May issue will find very few surprises in the construction details of this car.

Obviously there are significant dimensional differences and these are shown below.

'PRO-12'	'PRO-10'
Wheelbase	260mm
Front track	165mm
Rear track	165mm
Weight (rolling chassis)	120g

The most obvious cross-over from 1/12th scale technology is the latest style of rocker ball rear end suspension. The 'Pro-10' also features this with the steel balls held captive in plastic mouldings fitted to a 'T' shaped flex plate made from 2mm thick GRP. These rockerballs gives the rear axle/motor pad it's lateral suspension movement. The amount of movement is controlled by two screw adjusters fitted with silicone tubing and installed either side of the flex plate. Forward suspension movement is dependant on the thickness of the flex plate and controlled by a friction damper acting on the axle pad top plate. The rear pod is the same 'U' shaped alloy channel but bigger than the 1/12th scale item and feature adjustable ride height for the axle. These use oval shaped plastic bearing adaptors with the bearing position changed to alter the height of the axle. Lastly the

pod is anodised in a tasteful shade of Parma blue.

Also at the rear-end is a precision ball-type differential and carbon fibre rear axle. When building the diff care should be taken when first fitting the Nyloc nut that holds the diff together and adjusts the action. When the nut is new it will require greater force to screw on the shaft and this may result in the threaded stud at the end of the axle being pulled out. The alternative is to start the nut off on an equal size screw to 'wear' it in.

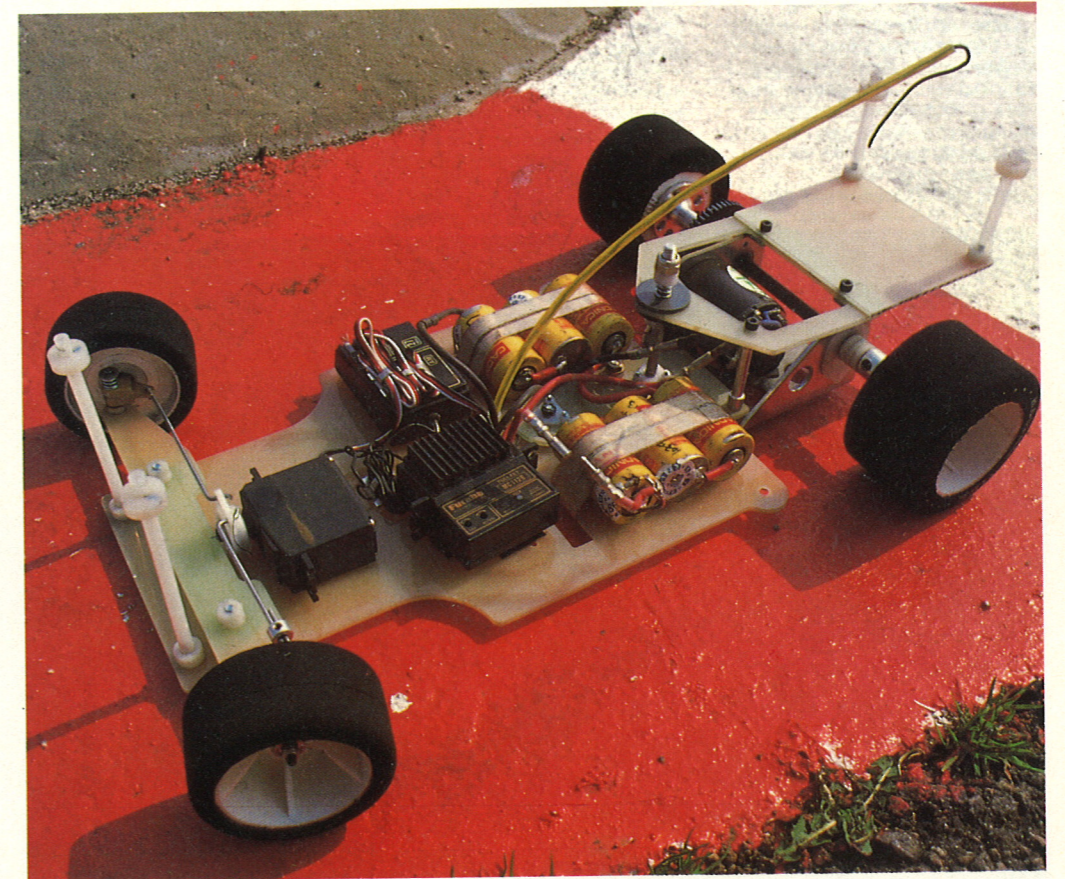
The front suspension uses a single GRP beam fitted on top of two plastic mounts. The steering stub axle blocks are installed either end on steel king pins and spring loaded to give more suspension movement. The 'Pro-10' instructions recommend that the king pins be highly polished to give a smooth action to the steering blocks. This part of the construction is very important and should be carried out by spinning the king pins in a drill and polishing with wire wool or very fine emery cloth. Also make particularly sure that the king pins are at right angles to the beam.

The castor of the front wheels can be set by placing different thickness 'Castor Wedges' between the plastic mounts and beam. The wedges are included in the kit.

The more observant of you will have already noticed that the chassis has the facility for fitting eight cells in saddle pack configuration. The truth of the matter is that the extra slots allows the position of a normal 6 cell pack to be altered backwards and forwards to affect rear-end grip or front-end steering bite. Also for oval racing more cells can be placed on one side to shift the weight emphasis onto the inside wheels. The saddle packs should be held in by either tie-wraps or glass fibre tape or else retained using the 'Corally' plastic saddle pack holders imported by Intronic.

Finally the 'Pro-10' kits are supplied with foam tyres glued and trued on lightweight plastic hubs. These will also be available as spares. Other items included are a clear Lexan body and body mounting kit. The 'Pro-10' on-road kit is available in either 'Sports' or 'Nascar' versions depending on your choice of body. The 'Sports' type has an 'Osella P9' whilst the Nascar a '86 Monte Carlo'. All of the current range of Parma 1/10th scale saloon bodies will fit allowing a choice of 'Sierra Cosworth', 'Mustang', 'Corvette', 'Porsche 962', 'Escort RS' Turbo, 'AC Cobra' and 'Camaro' to mention just a few.

Just to get you confused the



Opposite page top: The Osella bodyshell which is available for the PRO 10 is very similar to the successful 1:12 shell and works very well. Centre: Saloon bodies! They handle less well than the Osella but look great! Above: The chassis of the PRO 10 is simple but effective using proven 1:12th chassis design - the cars handle very well and give a feeling of confidence during cornering. Below: RS Turbo shell should go down well with boy racers!



'Pro-10' kits are also supplied in basic and deluxe versions. The basic kit has everything mentioned above but the deluxe type has an electronics

package included. This gives you a standard 'K-stock' motor, 6-cell matched Sanyo batteries (needs to be made up) and resistor type speed controller.

Helger Racing the European Parma agents are planning to include ball races for the rear carbon fibre axle as the phosphour bronze in the kit will

reduce the life of the axle.

Down at the London Radio Car Club's 1/8th scale circuit situated at the Crystal Palace National Recreation Centre flat track racing has already been taking place. Although still on a small scale the *Pro-Panthers* have been growing in popularity after only a couple

of meetings against the likes of 'Cat's', 'Mid's' and other 1/10th scale buggies.

For a start the 'Pro-10's' are significantly quicker in a straight line and around some of the faster bends. Out of hairpins however you have to be careful in applying the power as a spin-out is

extremely easy to produce.

Despite the cold weather and dusty track conditions rear-end grip has not been the problem it was expected to be.

Aerodynamics plays a particularly important part in getting the cars to handle. Sports bodies like the 'Osella' and 'Porsche 962' make the

cars much more stable and less tail happy. The 'NASCAR' shells provide a lot more front down force and consequently need a rear wing to compensate.

Experimentation with different tyres and even traction compounds has not given conclusive results except

that running 'low profile' tyres helps the handling much more. The kit rubber also gives the most consistent results!

Driving the 'Pro-10' is completely different from any other type of 1/10th scale car. With this car the key to going quickly is in taking proper lines into corners and keeping the

speed constant.

Applying too much throttle too soon will make the car spin unless your reactions are good enough to catch the rear end - before it breaks away.

Someone compared it to the old days of 1/12th scale when cars were raced on polished wood floors using silicone

rubber covered tyres. At present the cars are extremely quick and excellent fun to race. What is more they look much better on the circuit than a normal racing buggy. As the weather hots up the cars will be going even quicker and not just at Crystal Palace.

Events are already being

planned at Tibshelf in Derbyshire, Peterborough, Lilford Park, Mildenhall and North Weald.

Meanwhile *Parma's* 'Pro-Panther 10' kits are available through your local *Parma* stockist.

Prices Basic Kit £119.95  
Deluxe Kit £167.95

