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Image		
Product	410007 Serpent S120 PRO 2wd 1/12	
Product-description	See below	
Web link:	<a href="http://www.serpent.com/product/410007">http://www.serpent.com/product/410007</a>	
Intro-date	Now	

### Serpent S120 PRO 1/12 electric pan car


The S120 pro is a revolutionary innovative 1/12 <sup>th</sup> scale car design based on the F110 SF4.	

<p>Main new items</p> <p>New innovative design for the rear pod with side bearings in linear guides replacing the sidelinks. With a traditional sidelink design, designers use long side links to have the relative roll movement between pod and chassis as linear as possible. But no matter how long the links are, there is always a longitudinal component in the roll motion. With the new side-bearing design, the roll motion is completely linear and independent thus the cornering is completely independent from accelerating or braking. While it doesn't change much on the mid corner handling of the car, this gives an unprecedented consistency and stability at corner entry when the braking and steering input overlaps and at corner exit when the throttle is applied before the steering is completely straight.</p> <p>What you feel is, you can brake harder into the corners and accelerate earlier out of corners.</p>	
<p>Lipo longitudinal or Lipo transversal with narrow chassis design. The new side bearing design opens the possibility to use both inline and cross lipo orientation while keeping a narrow chassis design.</p>	  
<p>Special holders for inline lipo configuration included in the kit, optional for lipo cross configuration</p>	 

<p>Full strength topdeck to prevent longitudinal flex and keep torsional flex on a reasonable level. 2 body mount positions are included. It does not need to be removed to exchange the lipo in any configuration</p>	
<p>1-screw Lipo mount in all lipo orientations. For the inline lipo orientation, the lipo is held by an aluminium holder that can be removed through the chassis bottom. For the transversal lipo orientation, the lipo can be pulled through the side. This is possible thanks to the no-link design. No more excuses not to charge the lipo in the car.</p>	 
<p>The easy to work on and strong front suspension from the F110 SF4 is evolved for the pancar specific demands. All screws are easily accessible.</p>	
<p>Servomount</p>	
<p>Double short tube system for the rear roll damping. Compared to a single tube design, it gives a 100% symmetric driving feel. The tubes also work as roll limiter, which reduces the risk of dirt getting into the tubes or oil leaking out from them.</p>	
<p>New ultra-low center of gravity rear pod. The angled rear plate gives torsional stiffness, protecting the rear shaft and bearings, while keeping all masses low in the pod. This increases rear grip of the car, and preventing grip roll in high grip conditions.</p>	
<p>The bulkheads are completely redesigned to keep masses as low as possible and at the same time have a strong pod that survives rather hard crashes</p>	

<p>The rear shaft mount is completely new and innovative. Ride height and wheelbase can be adjusted very precise with shims.</p>	
<p>New ball diff with an additional long-life thrust bearing that runs very smooth and still allows a strong locking effect to outperform today's bevel gear diffs on most surfaces</p>	
<p>Rear carbon shaft with variable diameter. The carbon shaft is reinforced by an aluminium sleeve at the bearing and where the pin connects the aluminium thread insert with the shaft. This makes the shaft one of the strongest on the market. With the bigger (8mm) bearing on the right side also helps with the higher load of the right side bearing because of the bigger leverage and the spur gear.  The thread insert goes all through the shaft until the pin, so the tension force of the thread does not pull on the gluing.</p>	
<p>Pod Bulkheads completely keyed to the graphite plates to avoid tweak issues</p>	
<p>New improved shocks, much easier to build, with same, bigger piston diameter as the Project 4X, and the Project 4X bleeding hole for easy rebound adjustment</p>	
<p>After the huge success of the F110 SF4, The step to develop a 1/12<sup>th</sup> scale car on the same platform was logical. The focus was to make the car easy to work on and durable without sacrificing performance.</p> <p>We proudly present another Masterpiece of innovation and performance. Enjoy the assembly and feel the difference at the racetrack.</p>	

## Specifications in detail

<p><b>General</b>  Serpent S120 pro 1/12<sup>th</sup>scale electric  190mm rc car  Rear wheel drive, kingpin front  suspension, rear pod direct drive motor  (not included)</p>	
<p><b>Dimensions</b>  Trackwidth front 168mm Trackwidth rear  169.5mm (adjustable with shims)   Wheelbase 202mm  Rear adjustable range +2mm (shims)  Front adjustable range +3mm (inserts in  0.6mm steps)</p>	
<p><b>Chassis</b>   Symmetrical chassisplate for even flex  and torsion in high quality carbonfiber  with big cutouts for lowest possible  electronics positioning and low weight</p>	
<p><b>Front topdeck/Radioplate</b>   carbon fiber radio plate which also serves  as front topdeck, eliminating the need for  a separate floating servomount</p>	
<p><b>Battery/electronics layout</b>   the car is consequently optimized for 2s  shorty lipo use.  The battery can be used in inline and  cross configuration. In inline  configureion the electronics get placed  besides the battery. This is mainly  recommended for stock class racing with  low power and small footprint ESCs to  maximize cornerspeed  For cross configuration there is a  electronic holder available to mount the  electornics in the center in front of the  battery. This configuration optimizes  forward and braking traction and gives  more space for bigger ESCs used in  midified racing.</p>	
<p><b>Battery-holder inline</b>   Alu battery holder with lowered battery  position for lowest possible center of mass  and highest cornerspeed.  Battery can be removed from the car with  only one screw. No more excuses not to  charge the battery in a lipo bag.  The battery can be addached to the  battery holder with battery tape or velcro  tape or it can just lay loose in the tray.</p>	

<p>Battery-holder cross</p> <p>The battery holder can be opened with one single screw and the battery can be removed and replaced on the side. This works to the left and to the right and gives total freedom for electronic placement.</p>		
<p>new bigbore shocks</p> <p>The shock internals are optimized to use a bigger diameter piston while using the same springs compared to the previous S120 versions.</p> <p>The shock seal cartridge and piston are the same easy to use system as in the 4x evo.</p> <p>A bleeding hole in the bottom which is closed by tightening the lower balljointmakes rebound setting as easy as never before</p> <p>threaded shocknut with o-ring for safe and easy preload adjustment</p> <p>Front and rear adjustable wheelbase.</p>		
<p>Front wheelbase and caster adjusted with inserts with a tight tolerance to keep all settings even in hard crashes</p>		
<p>Front suspension is very lightweight and extremely durable at the same time by matched component flex characteristics</p>		
<p>Suspension front</p> <p>Kingpin suspension with fixed lower arm and upper wishbone with turnbuckle for easy camber adjustment and double adjustable ackermann geometry</p>		
<p>Steeringblocks</p> <p>Strong composite steeringblocks with 2 Ackermann positions, The steeringblocks feature inserts, which allow to change the kingpin inclination (inwards or outwards) to adjust the camber on high steering angles and the rollcenter at low steering angles</p>		
<p>Suspension geometry is not influenced by wheelbase changes</p>		
<p>The servomount in the fixed front arm ensures exceptional precise steering response. Longitudinal and torsional flex don't influence the steering.</p>		
<p>Pod</p> <p>all structural pod parts are keyed for easy and precise pod part alignment</p>		

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