

# Serpent S120 Link 1/12 pancar EP

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## Serpent S120 Link in brief

The S120 LinkÂ chassis consists of 2 main elements, the 2.5mm thick carbon fibre chassis plate and the rear aluminium motor pod. The chassis uses a Link-system , and is damped using a conventional centrally mounted shock absorber together with a laterally mounted floating monoshock.

The front end of the car is completely adjustable and utilises the now standard fixed lower suspension arms combined with active top wishbones, which together with kingpin mounted springs ensure that the car is able to corner at high speeds and soak up any small bumps found on the racing surface.

Source: Serpent

## Development

Serpent pan-car developers Markus Mobers and Paul Ciccarello, both with over 20 years of pan car racing experience, created this new masterpiece, assisted by Billy Easton and Michael Salven.

## S120 Front end

The front end of the car features 11 different adjustments to help you get the most from your car, all of which are easy to adjust and measure. Fixed lower suspension arms are themselves damped by the central strut which uses rubber o-rings to take up the flex in this area, while the grey anodised aluminium front upper wishbone mounts are available in different caster angles, the car being supplied with 6 degree versions as standard. With the steering block king pins spring loaded, the cornering forces are channelled through the upper wishbone, which enable the car to corner at high speeds.

## Monoshock

Another unique feature of the S120 Link is its laterally mounted floating monoshock which dampens the flex between the chassis and the motor pod.

Mounted using ball joints from the top of the rear motor pod, both ends of the shock shaft are attached to the top of the rear carbon body mount plate on the chassis, and thanks to its design even the smallest of movements between the front and rear of the car is easily absorbed.

This system plays a big part in how the car turns into a corner which can be adjusted through the use of different oils and shock pistons.

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## Central section

The springloaded side-bars, the links,Â are made of composite nylon and control the roll of the chassis, together with the lateral damper and the main central shock.

Precision made springs and pivot balls.

The central section is a combination of elements to control the movements of the rear end perfectly

- a central main shock, based on the famous Serpent RCC technology; the shocktower enables various angles.
- the laid down mono-shock, same as used in the S120T before, with through type shock-rod, and excellent dampening characteristics
- 2 spring loaded shaped side bars

These elements interact to create the best possible handling (roll, bump and alignment) under all grip-conditions.

#### Body post

For securely mounting the body shell to your S120 Link, the car has strong plastic body posts front and rear. All 4 posts are supplied with orange anodised adjustable collars to precisely adjust the body's height and the posts are supplied extra long to allow the user to cut them to their own preferred length. The front body posts have also been designed to help protect the front of the carbon chassis from splitting in the event of a heavy front impact.

#### Battery mounts

On the S120 Link, the cells can be mounted in 2 different positions by simply changing the composite battery insert mounting position. Attaching it to the front or rear of the slot means the cells can move by 4mm, perfect for adjusting the cars weight distribution.

The S120 Link also includes 4 pcs of Lipo inserts made in nylon, which can be glued to the Lipo pack and fit the battery-slots perfectly and thus keep them in place.

#### Servo saver

The S120 Link comes supplied with a high quality miniature servo saver, which through the use of orange anodised shims, has adjustable Ackerman.

The kit includes 3 alu servo posts to select from, which enable perfectly centered mounting of any popular brand servo.

#### Rear axle mounts

The lightweight graphite rear axle is mounted on bearings that sit within eccentric composite inserts that allows the user to quickly and easily change the rear ride height of the car simply by changing between inserts.

The kit comes supplied with all 9 inserts which range between 0 and 4mm, each differing by 0.5mm and all are reversible for an even wider range of adjustment.

#### Rear ball differential

The S120 Link comes supplied with a durable and high performance ball differential. Easily adjusted by a plastic nut, accessible through the right rear wheel, the diff uses high quality steel balls and plates and is supplied with both suitable silicone and graphite grease for use during assembly and maintenance.

The re-designed rear diff features improved hardened D-plates and carbon shaft assembly for super smooth diff action.

#### Central shock absorber

To aid rear traction under acceleration and to absorb bumps, the S120 Link sports a centrally mounted shock absorber. Supplied with a soft spring, the pre load of which can be adjusted, the front mount of this shock absorber is used for adjusting the rear down stop and range of movement between the chassis and motor pod.

The central shock is mounted on a shock-tower with a number of positions to choose from.

#### Rear motor pod, chassis

The strong basis is formed by the 2.5mm thick carbon fibre chassis plate with pockets to allow 4-cell packs or 1S Lipo

pack, with supports enabling a forward or backward battery position, and enough space for all the valuable electronics.

The newly designed motorpod is a beautifull combination of high quality machined alu brackets and top quality carbon fibre parts, bolted together to create an ultra stiff rear pod. The new motor-bracket allows the brushless motor to be mounted in the optimal position for car balance and offers good heat dissipation as well .