

Product Product-	Serpent F190 1/8 EP With the excitement and growth of the Formula 1 sport and racing scene, as it continues
description	to soar across the globe, Serpent introduces the brand new and innovative F190. Inspired by the legendary Formula 1 cars of the early 2000s, the Serpent F190 embodies the perfect fusion of nostalgia and cutting-edge technology. With its meticulously crafted aerodynamic body, precision-engineered chassis, and high- performance components, the F190 is engineered to dominate the track with unparalleled speed, agility, and style. Whether you're a seasoned veteran or a newcomer to the world of RC racing, the Serpent F190 offers an exhilarating and immersive experience like no other. From tight corners to blistering straights, the F190 delivers unmatched performance, allowing drivers to push the boundaries of their racing skills and unleash their inner champion. Join the revolution and experience the thrill of Formula 1 racing in a whole new dimension with the Serpent F190. Get ready to carve your place in history with Serpent's latest masterpiece.
Web link:	www.serpent.com/300030
Intro-date	August 2024

# **Chassis and Bulkheads:**

Prepare to experience the pinnacle of RC racing performance with the Serpent F190, meticulously crafted with carbon fiber components and aluminum bulkheads throughout to deliver unmatched precision and agility on the track. Engineered for maximum performance, every component of the F190 has been carefully designed to elevate your racing experience to new heights.

The F190's carbon fiber chassis offers the perfect balance of strength and lightweight design, ensuring optimal durability while maintaining agility during high-speed maneuvers. This advanced material provides the foundation for superior handling and responsiveness, allowing drivers to push the limits with confidence and precision.

Complementing the carbon fiber chassis, 7075-t6 aluminum bulkheads are strategically integrated throughout the F190's structure. These precision-engineered components enhance the car's overall rigidity and stability, ensuring consistent performance and reliability in even the most demanding racing conditions.

With its combination of carbon fiber and aluminum bulkheads, the Serpent F190 sets the standard for performance and craftsmanship in the RC racing world. Whether you're competing on the track or tearing up the pavement, the F190 delivers an exhilarating driving experience that will leave you craving more. Whether you're competing on the track or tearing up the pavement, the F190 delivers an exhilarating driving experience that will leave you craving more with each and every battery



# Main Drivetrain:

At the core of the F190 lies a meticulously crafted drive train, where every component is designed to deliver maximum power and responsiveness. The use of high-quality spring steel and 7075-T6 aluminum ensures exceptional strength and resilience, providing a solid foundation for transferring power from the motor to the wheels with minimal loss. With this combination of materials the Serpent F190 offers uncompromising performance and reliability on the track, battery after battery.

The F190 has been strategically engineered with a 4wd configuration to conquer every type of racing condition, whether on the track or the street. Born from a passion for performance and versatility, the F190 sets a new standard in RC racing, offering drivers of all levels an exhilarating experience like no other.

For the competitive racer, the F190's 4wd design provides unrivaled traction and stability, allowing you to unleash maximum power and agility on the track. Whether you're hitting tight corners or going full throttle on a high-speed straight, this configuration ensures precise control and blistering acceleration, enabling you to dominate every lap and outmaneuver the competition with ease.

Meanwhile, for the casual enthusiast seeking excitement on the streets and alleys, the F190's 4wd setup delivers endless thrills and adrenaline-fueled adventures. Its responsive acceleration makes it perfect for navigating your Local Street, parking lot or alley, with endless fun and drifting excitement. Get behind the wheel and experience the ultimate fusion of performance with the Serpent F190.

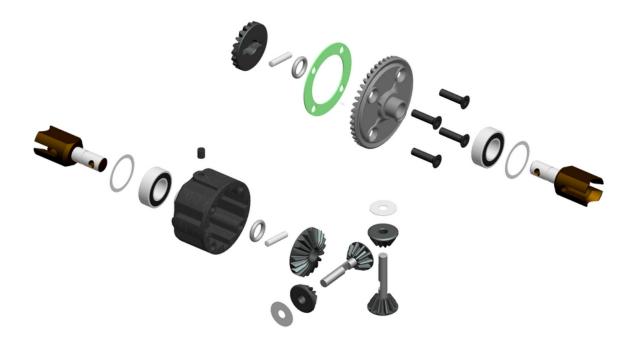


# High performance Differential:

Experience the pinnacle of power, traction, and reliability, featuring our advanced HTD (High Torque Drive) differentials meticulously engineered for superior performance on the track.

Designed to deliver maximum power delivery and rear traction, our HTD differentials are a staple of the F190's exceptional performance. Crafted with precision and durability in mind, these innovative differentials ensure efficient power transfer to the rear wheels, allowing you to accelerate with confidence and maintain optimal traction through every turn.

But it's not just about power and traction—the Serpent F190 is built for reliability, race after race. Our HTD differentials are engineered to withstand the demands of intense usage, providing consistent performance and peace of mind every time you hit the throttle. With their robust construction and proven durability, you can trust the F190 to deliver championship winning performance, time and time again.

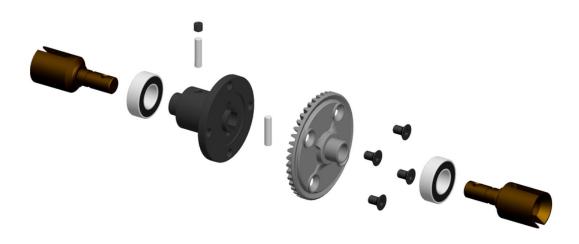


# **Solid Front Spool:**

Designed to enhance stability and cornering precision, the solid front spool ensures consistent traction and predictable handling through every turn. Whether you're navigating tight chicanes or powering through sweeping curves, the F190's front spool delivers the control and confidence you need to stay ahead of the pack.

With this innovative design, the F190 also offers exceptional braking performance, allowing you to decelerate with precision and control when it counts the most. Whether you're approaching a hairpin turn or slowing down for the finish line, the F190's front spool ensures reliable and responsive braking, giving you the edge over your competitors.

With the Serpent F190 and its solid front spool, you'll experience a new level of stability, control, and braking performance on the track. Get ready to unleash the full potential of your racing skills and dominate the competition with the F190's unmatched precision and performance.



# Solid Center axle:

With the F190, you have the option to choose between a selection of nylon gears for your drivetrain, giving you the flexibility to customize your setup for optimal performance.

But the benefits of the F190's adjustable gearing system don't end there. With its fully adjustable design, you can easily swap out gears, Nylon 40-46T and make on-the-fly adjustments to optimize acceleration, top speed, and overall performance on the track or in the street. Whether you're competing in a high-speed race or navigating technical corners, the F190's ability to swap gears gives you the competitive edge you need to stay ahead of the pack or smash your friends in a speed run.



# Shocks:

The Serpent F190 comes equipped with oil-filled coil-over shocks featuring a single X-ring seal, bladder and threaded collars. These shocks offer unparalleled reliability and consistency on the track. What's more, it provides a range of spring rate and piston options, allowing you to fine-tune your setup for optimal handling and control in any racing scenario.

The F190's single X-ring seal ensures superior sealing properties and minimizing oil leakage for smooth friction free damping performance throughout your races. These shocks feature a bladder system that separates the shock oil from the air, preventing air bubbles from forming and compromising performance. This design maintains consistent damping characteristics. This innovative design keeps the shock oil contained and prevents contaminants from compromising your car's suspension, giving you the confidence to push the limits lap after lap.

What truly sets the F190 apart is its versatility. With various spring rate options available, you have the flexibility to fine-tune your car's suspension to suit your driving style and track conditions. Whether you prefer a softer setup for improved traction or a stiffer setup for aggressive cornering, the F190's adjustable spring rates allow you to customize your car's handling characteristics with precision. Once you have your spring rate the way you want you can utilize the threaded collars to adjust the ride height independently, perfecting your setup.

With the Serpent F190 and its oil-filled coil-over shock and various spring and pistons options, you'll experience the ultimate in suspension versatility and precision on the track. Get ready to unleash the full potential of your racing skills and dominate the competition with the F190's unmatched customization and reliability.

With easily accessible components and straightforward maintenance procedures, our coil-over shocks can be fully disassembled, cleaned, and rebuilt to ensure peak performance race after race.



# **High Quality Performance tires:**

The F190 sets the standard for authenticity and performance with its true-to-scale F1 wheels, closed cell foams and tires.

Inspired by the iconic wheels of Formula 1 cars, the F190's wheels are engineered to replicate the look and feel of their real-life counterparts. From the intricate spoke patterns to the precision-machined details, these wheels exude authenticity and style, setting the F190 apart as a true representation of RC racing excellence. But the F190's wheels are more than just for show—they're built for performance, made from high quality, lightweight and durable material and come with an industry standard 12mm hex.

While the wheels look amazing, they have been paired with high-performance rubber tires made from specific rubber compounds, these tires offer exceptional grip, traction, and durability on any condition you throw at them. The F190's tires are optimized to maintain optimal contact with the track surface, ensuring consistent performance and predictable handling in even the most challenging corners.

Crafted with precision and attention to detail, the closed-cell foams of the F190 replicate the characteristics of real tire pressure, providing consistent support and stability throughout your races. These advanced foams ensure optimal contact between the tires and the track surface, maximizing grip and traction.

With the Serpent F190 and its meticulously designed wheels, closed cell foams, and highperformance rubber tires, you'll experience the perfect fusion of style and performance on the track. Get ready to turn heads and leave your competitors in the dust with the F190's unmatched authenticity and racing prowess.







# 7075-T6 Aluminum Motor mount with slide:

With convenience and precision in mind, the F190 features a 7075-T6 aluminum electric motor mount with a slide mechanism, offering easy adjustment for perfect gear mesh every time.

Crafted from high-grade 7075-T6 aluminum alloy, the motor mount of the F190 ensures exceptional durability and stability, providing a solid foundation for your electric motor. This lightweight yet robust material and design not only enhances the overall performance of the car but also ensures longevity under the rigors of intense racing.

One of the most exciting features of the Serpent F190 is its unparalleled compatibility with all 1/8th brushless motors. Whether you're a seasoned racer looking for maximum performance or a speed demon looking to set the neighborhood land speed record, the F190 has you covered.

The slide mechanism integrated into the motor mount allows for quick and precise adjustment of the gear mesh with a single screw from overhead, eliminating the hassle associated with horizontal setups. With just a turn of the screw and a little slide into position, you can achieve optimal gear mesh for maximum power transfer and efficiency.

With the Serpent F190 and its 7075-T6 aluminum electric motor mount with slide mechanism, you'll experience the ultimate in convenience and performance when adjusting various gear ratios, regardless of what final drive you wish to achieve.



# **Rear Pull-rod Shock Geometry with Adjustable Pivotball Suspension:**

At the rear of this groundbreaking RC machine, we've harnessed the power of pull rod shock geometry, aerodynamic linkage, and a fully adjustable pivot ball suspension to deliver true F1 performance and aerodynamic excellence.

## **Pull Rod Shock Geometry:**

Experience the pinnacle of suspension innovation with the Serpent F190's pull rod shock geometry. Inspired by the precision engineering of real F1 cars, this advanced suspension system optimizes weight distribution and aerodynamic efficiency. With the shocks at its lowest point, it provides the car with incredible stability, predictability and control. All while giving it an unbelievable low CG.



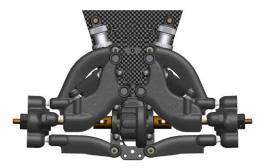
#### **Rear Aerodynamic Arms and Linkage:**

Take your racing experience to new heights with the Serpent F190's aerodynamic arms and linkage system. Crafted to minimize drag and maximize down force, this groundbreaking technology ensures scale realism all the while giving you a competitive edge. By channeling airflow efficiently over and around the suspension linkage and chassis, the F190 delivers uncompromising performance and aerodynamic superiority on every lap.



## Fully Adjustable Pivot Ball Suspension:

Fine-tune your setup for ultimate performance with the Serpent F190's fully adjustable pivot ball suspension. Whether you're adjusting camber with the upper pivot ball, the roll-center, anti-squat, pro-squat with the simple installation of shims on the inner pivot balls or the toe-in with the rearward pivot ball, the versatility is endless. The F190 literally has every adjustment you would ever need to experience F1 racing at your finger tips.



# Front Push-rod Shock Geometry with adjustable caster, camber, Ackerman:

Prepare to seize victory like never before with the Serpent F190, the epitome of precision engineering in RC racing. Boasting a revolutionary push-rod front suspension and a comprehensive suite of tuning features, including adjustable camber, caster, and Ackerman geometry, the F190 is your ultimate tool for dominating the track. With an outer pivot ball design adding to its arsenal of performance-enhancing features, the F190 delivers unmatched agility, control, and speed, giving you the edge you need to outpace the competition.

## **Push-Rod Front Suspension:**

Experience the future of RC racing with the Serpent F190's groundbreaking push-rod front suspension. Inspired by Formula 1 technology, this innovative system optimizes weight distribution and enhances responsiveness. With this incorporated design, it makes it possible to retain the purest parts of the true F1 function, design philosophies and exotic styling.





## Adjustable Caster block:

Gone are the days of cumbersome adjustments and complex setups. With the Serpent F190, finetuning your caster angle is quick, easy, and intuitive. Whether on the track or in the pit, making on-the-fly adjustments has never been simpler. The F190 is equipped with easy-to-adjust variable angle caster blocks, offering a range from 0 to 1.5 degrees. With this innovative feature, fine-tuning your setup has never been easier, allowing you to optimize your performance on the track or in the street.



## Quick and easy to adjust Ackerman settings:

With the Serpent F190's Ackerman arm offering three possible settings, achieving the perfect steering response is as easy as 1-2-3. Whether you prefer a sharper turn-in for tight corners or a more gradual response for high-speed sweepers, simply select the desired setting and hit the track with confidence.



## Front Aerodynamic Arms and Linkage:

Just as the rear of the Serpent F190 embraces aerodynamic innovation, the front end of this racing marvel is equally equipped to harness the power of airflow for unparalleled performance. Featuring aerodynamic suspension arms and linkage, the F190 maximizes airflow and generates down force to deliver superb handling and control on the track.

The front suspension arms of the Serpent F190 are meticulously designed to minimize air resistance and optimize airflow around the chassis. By reducing drag and turbulence, these aerodynamic arms enhance straight-line stability and cornering performance

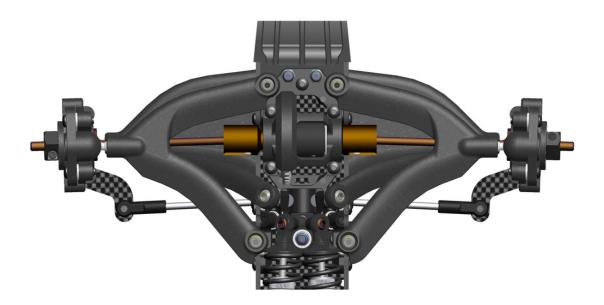
Complementing the aerodynamic suspension arms, the rocker arm linkage system of the F190 is engineered to maximize down force and improve overall handling. By efficiently channeling airflow over and around the chassis, the F190 generates the necessary down force to keep the car planted to the track.





#### Fully adjustable Pivot Ball Design:

Gain the competitive edge with the F190's inner and outer pivot ball design. By maximizing suspension articulation and minimizing friction, these advanced features ensure smooth and precise handling, allowing you to maintain optimal traction and control through every twist and turn of the track. With the pivot balls utilized on the front end, you can easily adjust your track width, and camber with the simple turn of the outer pivot balls. Inboard you can adjust the vertical height of the lower or upper arm, simply adding shims. No matter if your adjusting the roll center, anti-squat, pro-squat, camber or even the track width, you will be able to fine tune your setup to absolute perfection. With the F190's entire array of adjustable features, we think you will agree this machine is the epitome of next level performance.

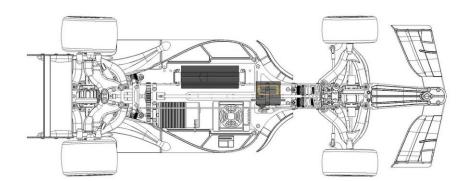


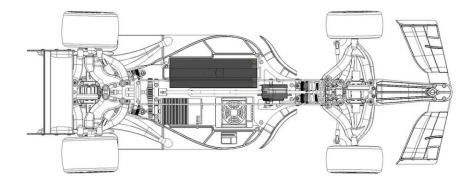
# **Designed for use with Heavy duty Electronics and High Capacity Batteries:**

Built to handle the power and meticulously engineered to accommodate heavy-duty electronics, motors, and batteries. With its spacious interior and robust design, the Serpent F190 is compatible with a wide range of heavy-duty electronics. Whether you're powering your machine with high capacity batteries, high-torque servos, powerful brushless motors, or advanced ESCs, the F190 provides ample space and support for all your electronic needs.

## **Multifunctional Battery compartment:**

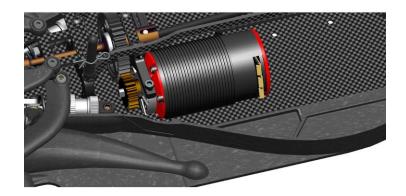
Designed to use with a large-sized or shorty battery, the F190 is engineered to accommodate most high-capacity block-sized 1/8th batteries as well as shorty batteries, ensuring you have the energy you need to dominate the track without compromise. With ample space to house 1/8th batteries, you can unleash the full potential of your machine without worrying about fit or compatibility issues. Say goodbye to interruptions and hello to uninterrupted racing performance with the Serpent F190. With its spacious battery compartment, you can enjoy extended run times and consistent power delivery, allowing you to push the limits of speed and agility all day long. You will be able to fit any Lipo battery with dimensions 139x47x50mm or smaller, into the compartment and can easily secure it using the high quality supplied Velcro strap.





## Powerful 1/8 sized Brushless motor compatibility:

Engineered to accommodate a wide range of 1/8th scale electric motors, including truggy-length variants (77mm). With its versatile design and spacious motor mounting area, the F190 ensures compatibility with the most popular motor configurations. Whether you're seeking blistering speed, explosive acceleration, or unmatched torque you can choose the perfect motor for your racing style and track conditions.



## Fits High Amperage Electronic Speed Controls:

Whether you prefer a standard 1/8 speed control or crave the raw power of a 180-amp highpowered unit, the F190's spacious design has you covered. No matter if you're running a standard sized 1/8 speed control for consistent performance or opting for a high amp draw oversized unit for maximum power output, you can sleep well at night knowing all options are available to you. With no limitations on the power output, you can take it easy having fun, or go full psycho and break the sound barrier of speed.



## **Overview of electronics:**

The Serpent F190 isn't just a racing machine; it's a symphony of engineering mastery, designed to give you the space you need to harness the full potential of your favorite electronics. Whether you're a fan of high-performance servos, advanced telemetry systems, or cutting-edge motors, batteries and speed controls, the F190 offers the flexibility to accommodate them all.



# **True Formula 1 Inspired Aerodynamics:**

Aerodynamics took center stage in the development of the F190, from the front all the way to the rear, authenticity was the utmost concern. With a functional front wing, high flow body, halo for the driver, an aero-dynamic underbody all the way to the rear wing and diffuser, this high performance remote control car, screams Formula 1. Every curve, every angle has been meticulously crafted to enhance performance on the track, allowing you to slice through the air with unmatched efficiency and grace.

## **Front-Wing:**

In the realm of racing, where precision is paramount and performance is everything, the front wing of the Serpent F190 stands as a testament to our commitment to excellence. Inspired by the finest designs of Formula 1, it represents the culmination of aerodynamic ingenuity, striking the perfect balance between downforce and efficiency. Crafted with meticulous attention to detail, the front wing of the F190 channels the spirit of its F1 counterparts, harnessing the latest advancements in aerodynamic engineering. Every contour, every element has been optimized to maximize downforce while minimizing drag, ensuring unrivaled stability and agility on the track.





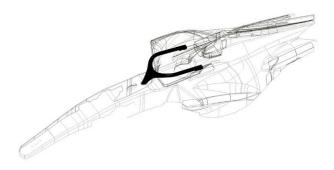
#### **Body:**

The body was the pride and joy of the development team as we took inspiration from the golden era of Formula 1, particularly the iconic cars of the early 2000s, to create a body that not only pays homage to those legendary machines but also delivers unparalleled style and function on the track. With its sleek and aerodynamic silhouette, the body of the F190 embodies the essence of those classic F1 cars, evoking a sense of nostalgia while embracing the latest in modern racing technology. Every curve, every contour has been meticulously sculpted to replicate the timeless elegance and aggressive stance of its predecessors.



#### Halo:

Drawing inspiration from the most sophisticated F1 designs of today we felt we wanted to mix a little bit of nostalgia with modern day safety. In doing so we added a Halo for the driver. Although it seems like a small detail that often could be overlooked the driver in this F190 is much safer now than he ever was before. Aside from the functional safety of the Halo, it also adds a bit of modern day flare.

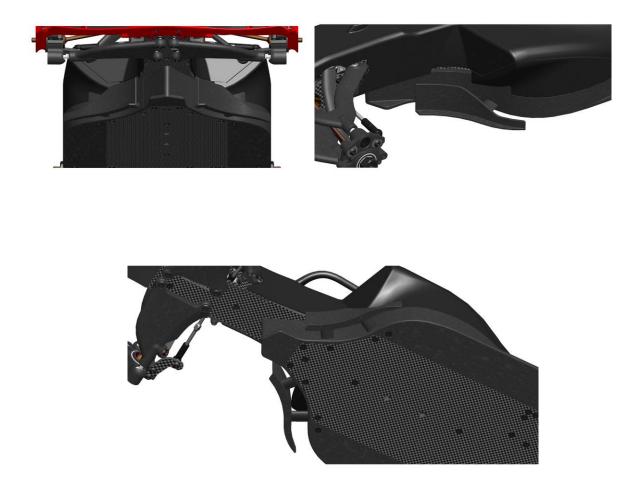


#### Aerodynamic Splitter, Bargeboards, Underfloor and Diffuser:

With the underside of the F190 at the heart of our wizardry, we meticulously crafted and harnessed the forces of precision and speed. As we continued our mission to create a scale F1model that truly represents the real thing, the aerodynamic underbody would have to be a master piece of design, function and ultimately performance.

## **Splitter and Bargeboards:**

Leading the charge is the front splitter, a precision-engineered component that slices through the air with surgical precision, optimizing airflow and generating crucial downforce to keep you firmly planted on the tarmac. This, coupled with the strategically positioned barge boards, works in harmony to minimize turbulence and maximize stability, allowing you to carve through corners with confidence and finesse.

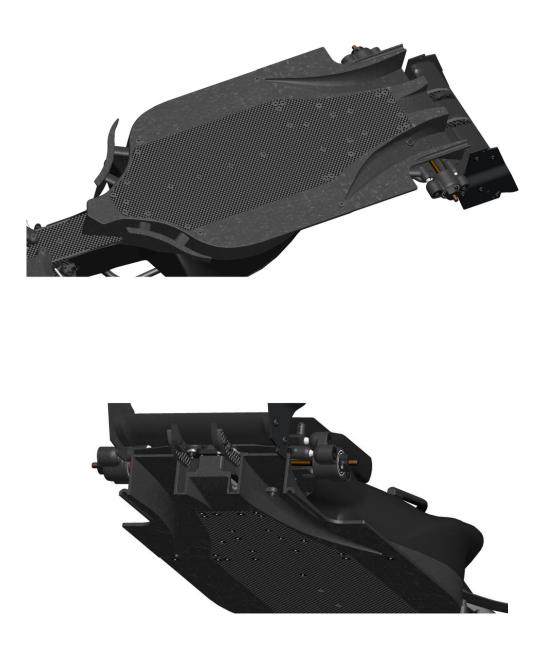


#### **Underfloor and Diffuser:**

Beneath the surface, the F190's aerodynamic under floor serves as the cornerstone of its performance, channeling airflow to create a low-pressure zone that efficiently directs and controls air flow. By managing airflow in this area, the under floor enhances stability and grip giving the car unprecedented feel of stability and control.

Complementing the under floor is the rear diffuser, a masterstroke of aerodynamic engineering. This ingenious construction works to efficiently channel airflow exiting from under the car,

creating a controlled vacuum effect that generates additional downforce. The net result of the under floor and diffuser working together enhances traction and grip, enabling you to push the limits of acceleration and cornering performance like never before. By minimizing drag and maximizing downforce, every aspect of its design is finely tuned to deliver a driving experience that's both exhilarating and precise.



## **Rear Wing:**

Incorporating Formula 1-inspired design principles, the Serpent F190 boasts a rear wing that's not just a visual homage but a functional powerhouse on the track. This rear wing isn't just about aesthetics; it's engineered for maximum down force and performance, with a touch of adjustability to fine-tune your driving experience. But what truly sets the F190 apart is its adjustable down force feature. With the ability to fine-tune the angle of the rear wing, drivers have the flexibility to tailor the car's handling characteristics to suit their driving style and track conditions.



#### **Conclusion:**

Experience the thrill of Formula 1 racing at the tip of your finger tips, with our meticulously crafted scale model race car—the Serpent F190. With a multitude of features at every turn, we've spared no effort in engineering a machine that embodies the look, performance, and feel of a true Formula 1 race car.

From its sleek and aerodynamic design to its precision-engineered components, every detail of the F190 has been carefully crafted to replicate the essence of Formula 1. Feel the excitement as you gaze upon its stunning exterior, meticulously detailed to capture the essence of speed and performance.

But the F190 isn't just about looks—it's about performance. Beneath its stylish exterior lies a powerhouse of engineering excellence, ready to deliver an exhilarating racing experience like no other. With advanced features such as adjustable down force and pull and push rod suspension, coil over oil filled shocks, gear differential and much, much more.

And the best part? You can experience it all from the comfort of your own home. Whether you're racing against friends, running slaloms in the street or tackling solo time trials on a race track, the Serpent F190 brings the excitement of Formula 1 racing right to your fingertips.

So why wait? Elevate your racing experience with the Serpent F190 and unleash the thrill of Formula 1 in your very own home. With its unparalleled combination of style, performance, and realism, the F190 is sure to delight enthusiasts of all ages.

