

# ADVANCED USER MANUAL

## SECTION 6: F1 REAR AERODYNAMIC

Class: F110 / 1/10 electric on road

### INTRODUCTION

**DEFINITION:** Generally speaking the design and choice of aerodynamic parts is a compromise between downforce and drag.

**Serpent F110 (SF2) rear aerodynamic parts:** Serpent offers 3 different rear aerodynamic parts that can adapt your car to each track, carpet or asphalt, low or high grip and conditions.

### WHEN TO USE EACH REAR WING AND DIFFUSOR

- Determine the track conditions
- Select the rear wing and diffuser that best suits the track conditions



as different wings and body shells is

rear wings and one diffuser. In this way you can adapt your car to open or tight tracks.

### DIFFUSOR

#### BLACK & WHITE #411355

(p)  
Best top speed  
Low downforce front wings (SF2 front)

#### BLACK & WHITE #411370

(p)  
Good rear grip  
Combination with all types of front

#### BLACK & WHITE #411312

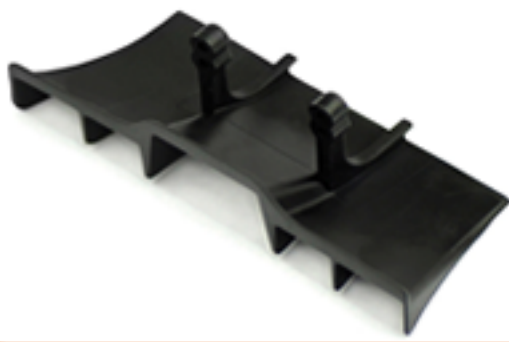
Best top speed  
Combination with high downforce front wings (installed).

Best top speed  
Combination with the three wings described

#### WHITE CARBON F110 #411372

Best top speed  
High downforce and more drag  
High downforce and drag

(Serpent tester and developer)  
To adapt my car aerodynamics to different track conditions, speed tracks are often very different, so I have created 3 different rear wing choices. I have tested and the rear wing choice offers a good compromise between downforce and drag. I have tested the rear wing with the diffuser and then I have fine-tuned the cars balance.



- REAR WING F110 BLACK L DF #4113**
- Least downforce and drag
  - Adjustable (three positions of the top flap)
  - Less rear grip, car difficult to drive. High
  - Use in fast tracks in combination with low wing with any flap installed).



- REAR WING F110 BLACK M DF #4114**
- Medium downforce and drag
  - Adjustable (three positions of the top flap)
  - Good compromise between top speed and
  - Can be used in most of the tracks in c wings



- REAR WING F110 BLACK H DF #4115**
- Most downforce and drag.
  - Not adjustable
  - More rear grip, car easier to drive. Lower
  - Use to improve corner speed in combination with SF2 front wing with all the flaps installed

- DIFFUSOR F110 #411371**
- Generates more downforce
  - Slight increase of the drag
  - More rear stability with a slight loose of
  - The diffuser can be used in combination with the wings above

- ADJUSTABLE REAR POD SUPPORT PL**
- Allows to use two positions of the rear v
  - Higher position generates more downfo
  - Lower position achieves less downforce



**TEAM DRIVER COMMENT**

- **By David Ehrbar (Top driver F1 1/10 car EP, Serbia)**  
 Personally I think that it is really usefull to be able to use different types of tracks. The needs on high speed and low drag especially in stock classes where the power is limited. It is a good base to start the set-up. I usually use the wide diffuser with the three different positions of the flap to find the best



Source:



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