

# ADVANCED USER MANUAL

## SECTION 6: F1 REAR AERODYNAMIC



Car / class: F110 / 1/10 electric on road

### INTRODUCTION

- **Definition:** Generally speaking the design and choice of aerodynamic parts as different wings and body shells is a compromise between downforce and drag.
- **Serpent F110 (SF2) rear aerodynamic parts:** Serpent offers 3 different rear wings and one diffuser. In this way you can adapt your car to each track, carpet or asphalt, low or high grip and open or tight tracks.

### WHEN TO USE EACH REAR WING AND DIFFUSOR



#### REAR WING F110 BLACK L DF #411354 & WHITE #411355

- **Least downforce and drag**
- **Adjustable (three positions of the top flap)**
- **Less rear grip, car difficult to drive. Highest top speed**
- **Use in fast tracks in combination with low downforce front wings (SF2 front wing with any flap installed).**



#### REAR WING F110 BLACK M DF #411369 & WHITE #411370

- **Medium downforce and drag**
- **Adjustable (three positions of the top flap)**
- **Good compromise between top speed and rear grip**
- **Can be used in most of the tracks in combination with all types of front wings**



#### REAR WING F110 BLACK H DF #411292 & WHITE #411312

- **Most downforce and drag.**
- **Not adjustable**
- **More rear grip, car easier to drive. Lowest top speed**
- **Use to improve corner speed in combination with high downforce front wings (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 top speed**
- **The diffuser can be used in combination with the three wings described above**



#### ADJUSTABLE REAR POD SUPPORT PLATE CARBON F110 #411372

- **Allows to use two positions of the rear wing**
- **Higher position generates more downforce and more drag**
- **Lower position achieves less downforce and drag**



### TEAM DRIVER COMMENT

- **By David Ehrbar (Top driver F1 1/10 car EP, Serpent tester and developer)**  
Personally I think that it is really useful to be able to adapt my car aerodynamics to different types of tracks. The needs on high speed and low speed tracks are often very different, especially in stock classes where the power is limited and the rear wing choice offers a good base to start the set-up. I usually use the wide rear wing with the diffuser and then I play with the three different positions of the flap to fine-tuning the cars balance.