



THE OFFICIAL GAME OF THE FIA WORLD ENDURANCE CHAMPIONSHIP

296 GT3





### An ideal pedal set for your favorite simulations

The P1 SIM Mistral pedal set delivers the precision needed to mirror the Ferrari 296 GT3 LM assisted, ABS-equipped brake feel. By tailoring your brake curve, you can place ABS onset exactly where you want it while preserving a broad, controllable mid-range for trail-braking. That modulation turns braking into a repeatable tool—stabilizing the car over bumps and kerbs, managing front-tire load, and rotating the car cleanly into the apex. The result is shorter, more consistent stops and race-stint pace you can sustain lap after lap.

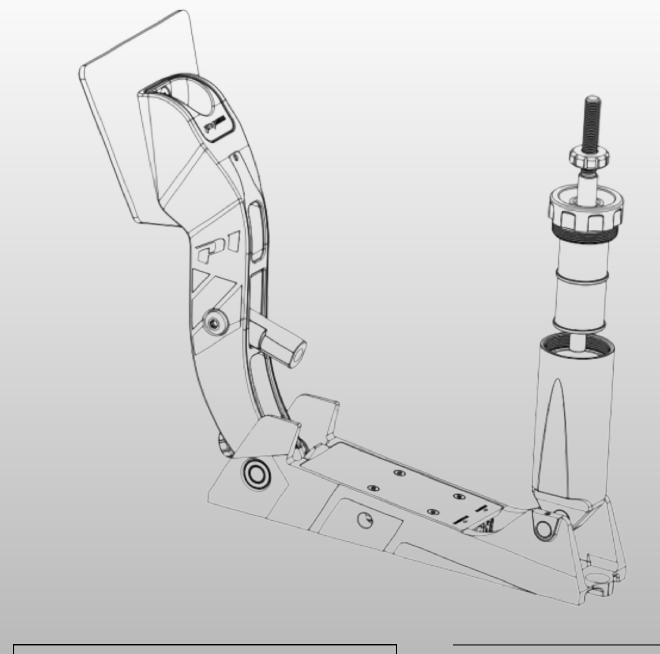






## Brake rubbers

The choice of elastomers mostly depends on your preferred pedal feel. As a general guideline, the LMGT3 category—especially with the Ferrari 296 GT3 LM works best with SOFT to VERY HARD compounds, allowing you to fine–tune modulation and replicate the firm, progressive resistance of a real GT3 endurance pedal setup.













# Brake to Win: When Control Becomes Your Strategy

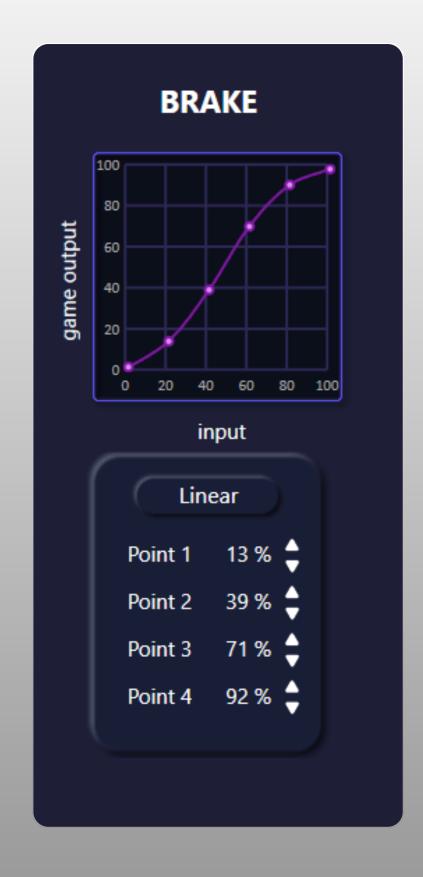
The Ferrari 296 GT3 LM. isn't about hybrid systems or futuristic aero—it's about mastering the fundamentals. With its rear—engine layout and mechanical grip—focused design, every braking phase becomes a test of balance and commitment. Precise brake modulation is key to managing weight transfer, avoiding excessive ABS engagement, and extracting maximum cornering speed. In sim racing, replicating this behavior brings you closer to the raw, analog feel of GT endurance racing—where control and consistency outweigh pure power.

Every press of the brake pedal is a chance to charge watts and unleash horsepower.











A personalized braking curve on the P1 SIM Mistral lets you meter pedal force across every phase of braking—matching the assisted, ABS—equipped character of the Ferrari 296 GT3 LM. and giving you precise control over initial bite, ABS onset, and trail-brake release.

Point 1 - 13% of Pedal Travel ( $\approx 8 \text{ kgf}$ ) – Initiation Phase: The first contact with the brake pedal, applying light pressure to settle the car and transfer weight to the front axle.

Point 2-40% of Pedal Travel ( $\approx 25$  kgf) – Building Braking Force: The pedal load increases sharply, providing strong deceleration while maintaining stability.

Point 3-71% of Pedal Travel ( $\approx 45$  kgf) – Maximum Control Phase: Braking reaches its peak efficiency, giving the driver full control in the heaviest braking zones.

Point 4 - 92% of Pedal Travel ( $\approx 58$  kgf) – Threshold Phase: Near the pedal hard-stop, maximum pressure is available; from here the brake can be progressively released to guide the car smoothly into corner entry.

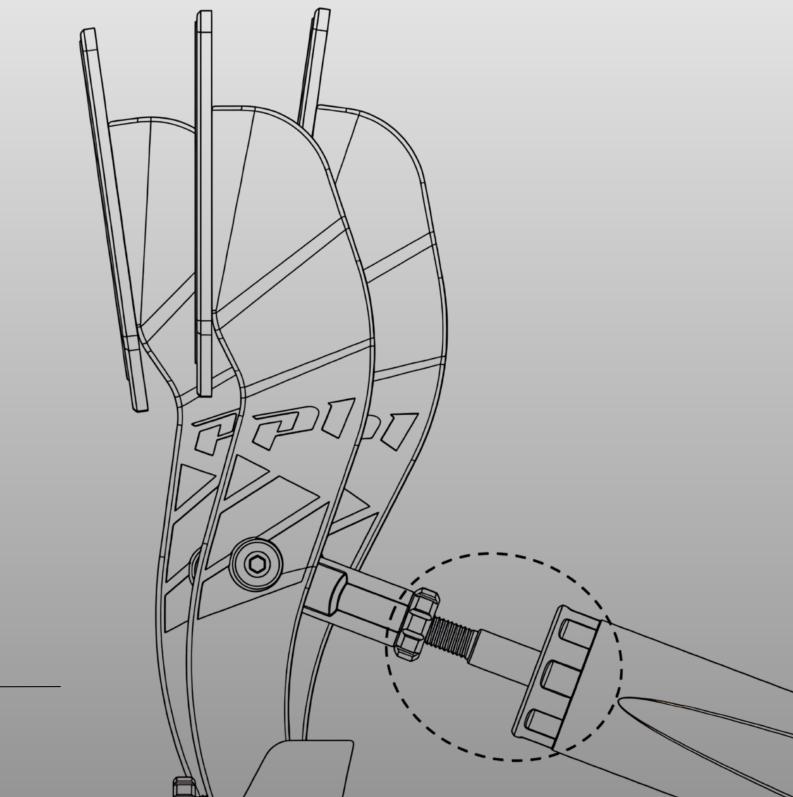






Ferrari 296 GT3 — braking baseline
For the Ferrari 296 GT3, the maximum
braking force is set at 58 kgf (≈ 570 N),
equivalent to ~114 bar with a 17.8
mmmaster cylinder and a 5:1 pedal
ratio. This value serves as the reference
for pedal calibration and aligns with our
telemetry target (p98 brake pressure ≈
6.0, ~60 bar, at ~90–95% pedal travel).

SimHub curve (unchanged)
The recommended SimHub curve uses four points: 13% ( $\approx 8 \text{ kgf} \rightarrow 10\%$ ), 40% ( $\approx 25 \text{ kgf} \rightarrow 60\%$ ), 71% ( $\approx 45 \text{ kgf} \rightarrow 88\%$ ), and 92% ( $\approx 58 \text{ kgf} \rightarrow 97\%$ ). This profile reproduces a GT3-style response: sharp initial bite, stable mid-phase, and a firm end of travel.











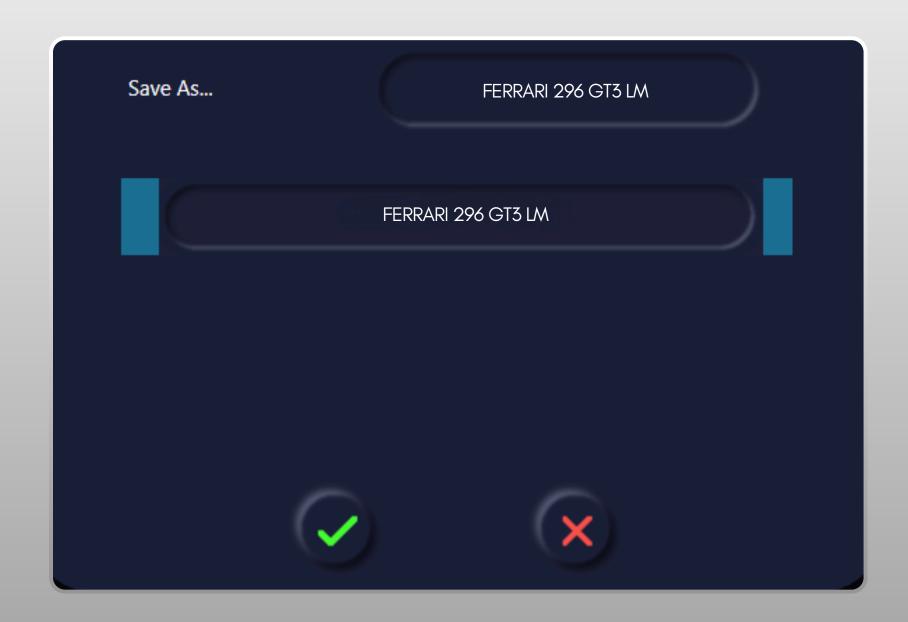
Ferrari 296 GT3 — Brake data acquisition - COTA





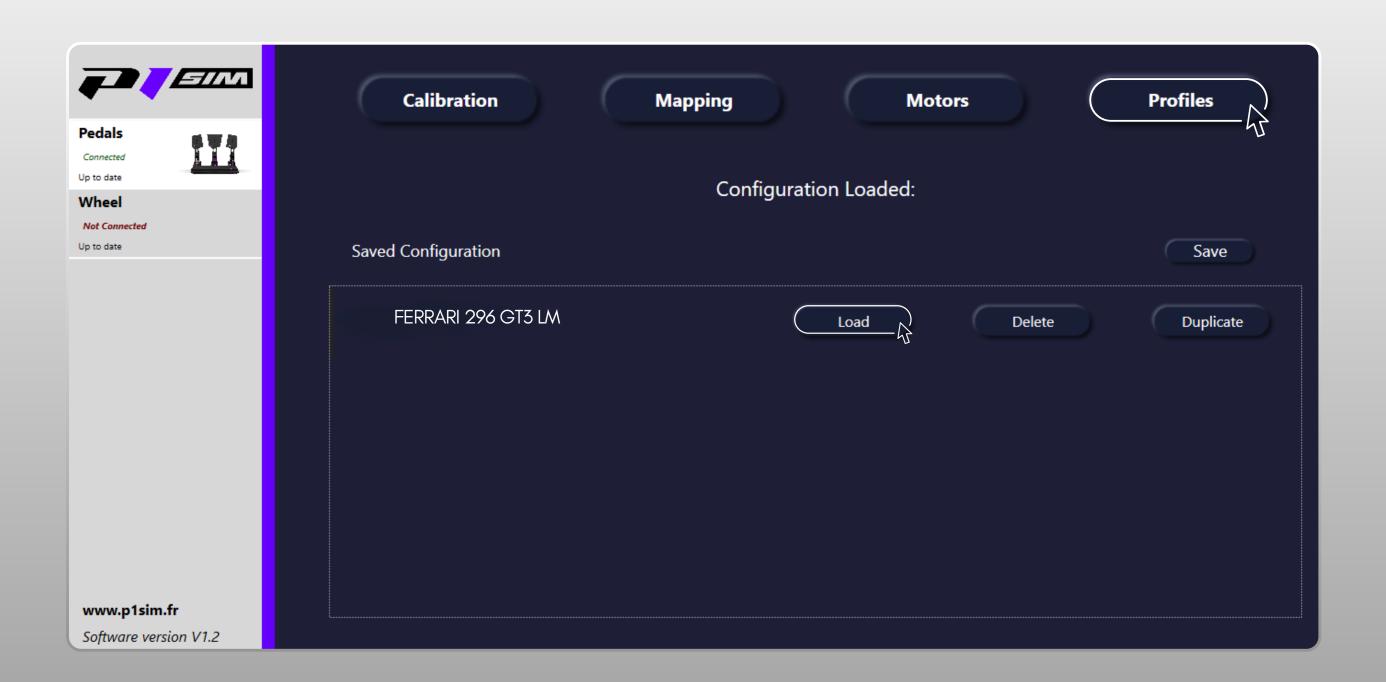
# Save your profile to simHub

To get the most out of each vehicle, don't hesitate to build a complete setup library.











Attention: before each on-track session, make sure to preload your favorite setup in the software.









**Traction Control Increase** 

**Traction Control Decrease** 

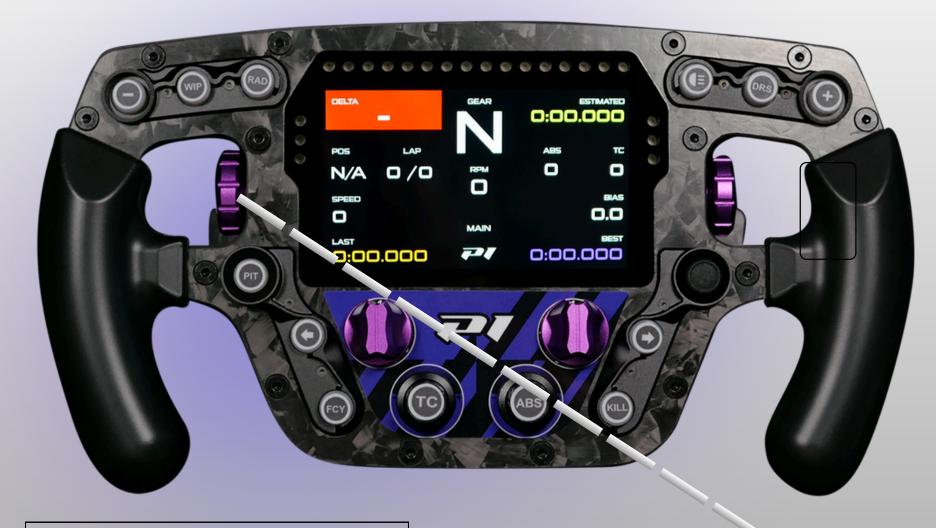
#### TC — Main Intervention Level

Role: Sets the overall sensitivity of the traction control.

- Logic: The higher the value, the sooner
   TC will react when the rear wheels
   start to spin.
- Effect on track:
  - High value (8–11) → maximum safety, very stable, but slower on corner exits.
  - Low value (1–3) → more freedom,
     the rear can slide to help rotation,
     but higher risk of spinning.
- Simple image: TC is the gatekeeper it decides when to step in.









**Traction Control Power Increase** 

**Traction Control Power Decrease** 

#### **TC Power Cut — Engine Power Reduction**

- Role: Controls the amount of engine power cut when TC intervenes.
- Logic: Not about when TC acts, but how strongly it reacts.
- Effect on track:
  - High value (7–10) → harsh power cut → very stable, but poor acceleration.
  - Low value (1–4) → softer cut,
     power comes back quickly →
     faster on dry track but riskier.
- Simple image: Think of it as the volume knob — TC can cut power hard (car feels stuck) or lightly (car feels alive).









**Traction Control Slip Angle Increase** 

**Traction Control Slip Angle Decrease** 

#### TC Slip (a.k.a. TC2) — Slip Tolerance

- Role: Defines the slip ratio allowed between rear and front wheels.
- Logic: Higher values mean less slip is tolerated → the car must stay more "locked in."
  - Effect on track:
    - Low value (1–3) → allows more rear slip → helps rotate the car on throttle, great for qualifying.
    - High value (8–11) → minimizes slip →
       best for wet conditions or cold tyres.
- Simple image: Slip is like an elastic band:
  - Short → rear stays tight and controlled.
  - Long → more freedom before TC pulls you back.









**Onboard ABS Increase** 

**Onboard ABS Decrease** 

#### **ABS – Balancing Stability and Rotation**

- On the Mercedes AMG GT3, the ABS ranges from 0 to 9, directly influencing how the car reacts under heavy braking.
- Effect on track:
  - 1–3: promotes oversteer, useful for tighter rotation but more difficult to control.
  - 4–6: a balanced zone, combining stability with agility.
  - 7–9: leans toward understeer, offering maximum stability but reducing corner entry rotation.



EAU ROUGE

**Traction Control Power Increase** 

**Traction Control Power Decrease** 

**Traction Control Slip Angle Increase** 

**Traction Control Slip Angle Decrease** 



**Traction Control Increase** 

**Traction Control Decrease** 



**Onboard ABS Increase** 

**Onboard ABS Decrease** 



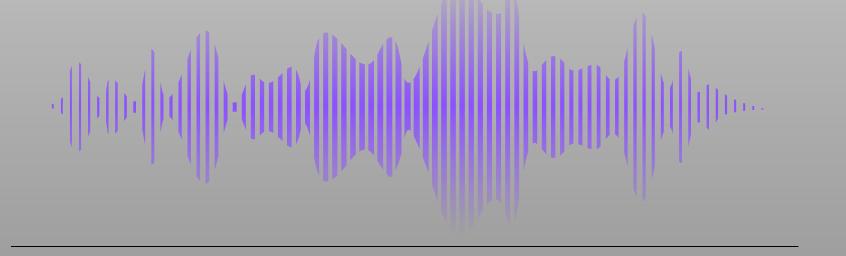


Ferrari 296 GT3 — p99 reference p99 is a threshold amplitude: the steeringcolumn torque that 99% of samples do not exceed (a force, not a frequency).

On our Ferrari 296 GT3, we measure p99  $\approx$  50.4 Nm (range 44.9–50.4 depending on rotation and kerb filtering). We then set the in-game gain so this p99 maps to  $\approx$ 11.4 Nm at the rim—that's  $\sim$ 23% on a DD12 at 100/100—yielding a realistic "heavy GT3" effort without clipping.







**P99** 

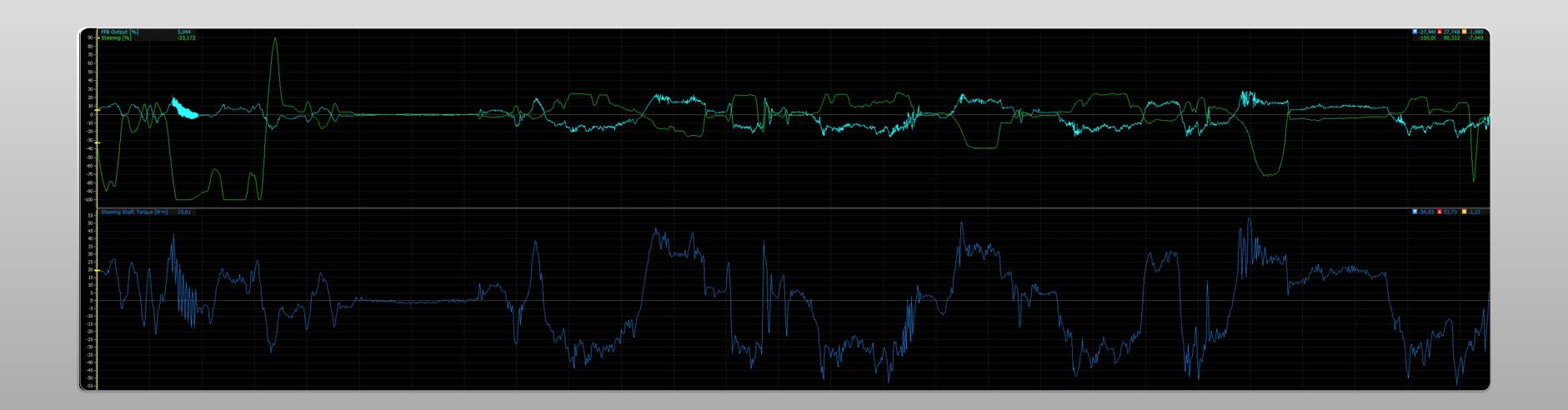
50.4 Nm





Ferrari 296 GT3 LM

Vehicle dynamics evolution over a complete lap of LUSAIL.



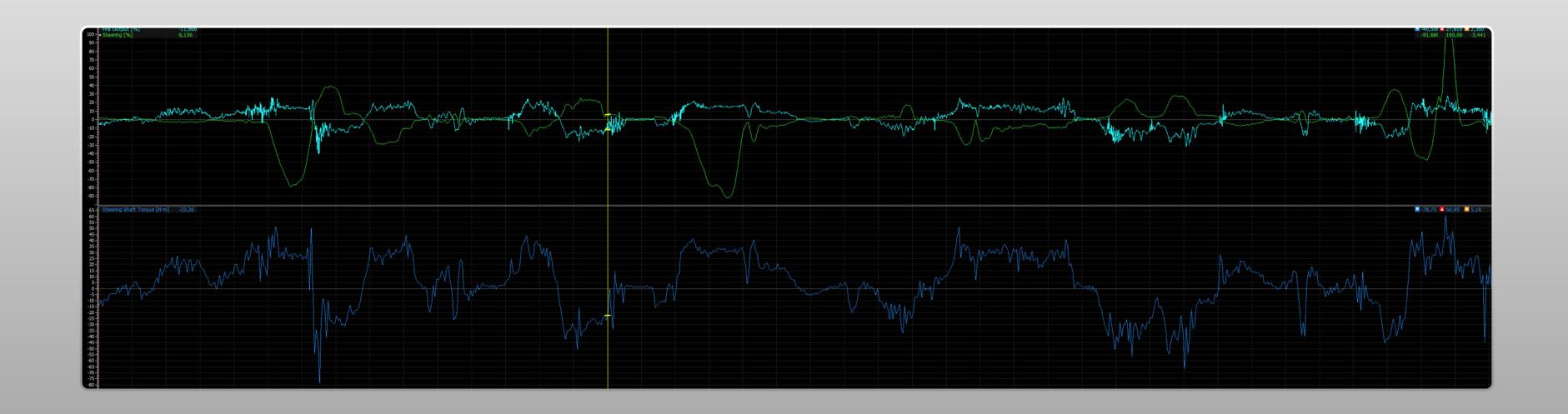






#### Ferrari 296 GT3 LM

Vehicle dynamics evolution over a complete lap of IMOLA.

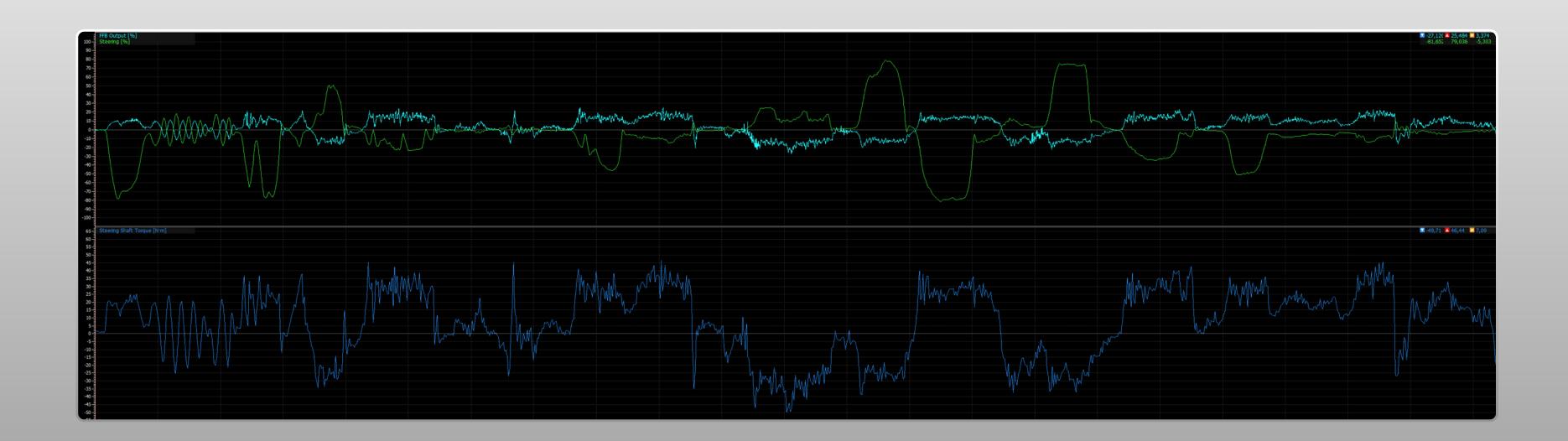






Ferrari 296 GT3 LM Vehicle dynamics evolution over a complete lap of INTERLAGOS.





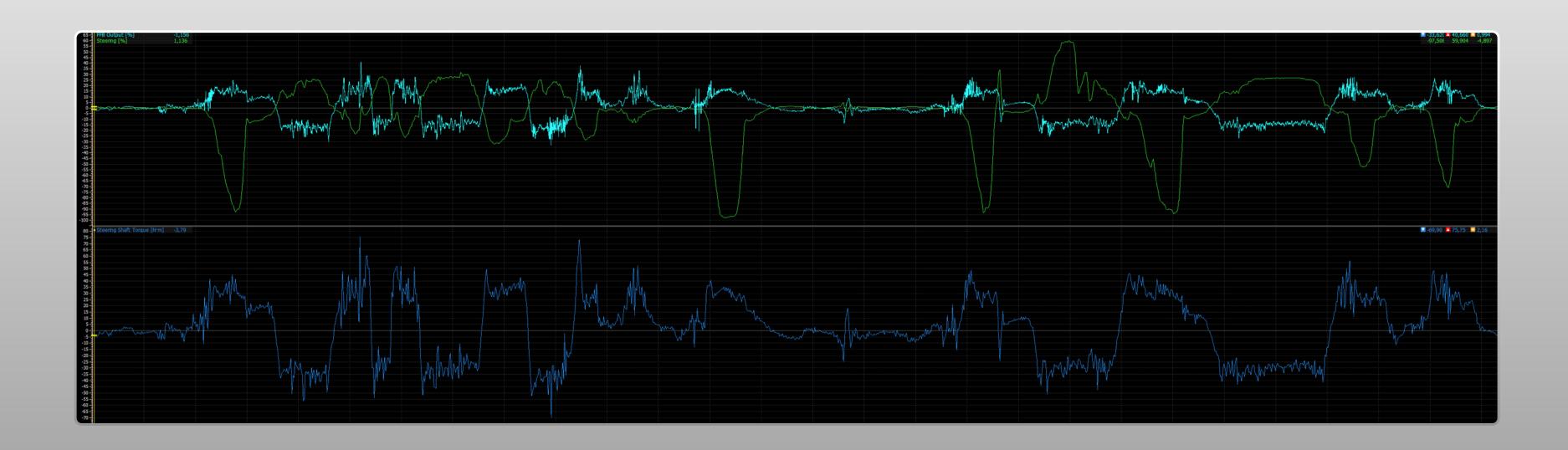






Ferrari 296 GT3 LM

Vehicle dynamics evolution over a complete lap of COTA.









**Force Feedback Strength** 

x Force Feedback Nm

Ferrari 296 GT3 — in-game gain guide (11.0 → 12.0 Nm)
This table converts, for each base torque between 11.0 and 12.0 Nm (FFB Strength 100%), the ideal in-game gain in full-usage mode with 5% headroom. It's computed from our Ferrari reference p99 = 50.4 Nm and shows both the "Ideal Gain" (one decimal) and the "Set in game" value rounded to the nearest integer.

In practice, just read the row you need: e.g., 11.0 Nm  $\rightarrow$  ~20.7%  $\Rightarrow$  21%, 12.0 Nm  $\rightarrow$  ~22.6%  $\Rightarrow$  23%. The goal is to use the full dynamic range without clipping; allow a tolerance of ±2 points depending on the track—drop if the FFB bar sticks at the top, raise if it never brushes the ceiling.

FFB Nm	11	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12
FFS LMU	21	21	21	21	21	22	22	22	22	22	23







**Force Feedback Strength** 

x Force Feedback Nm

Ferrari 296 GT3 — indicative table (3 → 12 Nm)
Here's an indicative table for bases from 3 to 12 Nm (in 1– Nm steps) to help users find the in-game gain that matches a base set to FFB Strength 100%. Values are computed from our Ferrari reference p99 = 50.4 Nm in full-usage mode with 5% headroom — formula: Gain (%) = (Nm\_base × 0.95 / 50.4) × 100, then round to the nearest integer in game.

Use it as a starting point and adjust by  $\pm 2$  points depending on the track (drop if the FFB bar sticks at the top; raise if it never brushes the ceiling).

If you run Strength < 100%, multiply the table's value by that percentage (e.g.,  $80\% \Rightarrow$  table gain × 0.8).

If you prefer targeting a specific rim torque (e.g., 9–10 Nm), use Gain = Nm\_target / 50.4 × 100 instead.

FFB Nm	3	4	5	6	7	8	9	10	11	12
FFS LMU	6	8	9	11	13	15	17	19	21	23







**Force Feedback Strength** 

**x** Force Feedback Nm

Ferrari 296 GT3 — indicative table (3 → 25 Nm)
Here's an indicative table for bases from 3 to 25 Nm to
help you find the in-game gain that matches a base set to
100% Strength. Values are computed using our Ferrari
reference p99 = 50.4 Nm in full-usage mode with 5%
headroom — formula:

Gain (%) = (Nm\_base  $\times$  0.95 / 50.4)  $\times$  100, then round to the nearest integer in game.

Use it as a starting point: adjust by  $\pm 2$  points depending on the track (if the FFB bar sticks at the top  $\rightarrow$  -; if it never brushes the ceiling  $\rightarrow$  +).

If you run Strength < 100%, multiply the table value by that percentage (e.g.,  $80\% \Rightarrow$  table gain × 0.8).

Finally, if you prefer targeting a specific rim torque (e.g., 9–10 Nm), use instead: Gain = Nm\_target / 50.4 × 100.

FFB Nm	3	5	8	9	12	15	18	21	25
FFS LMU	6	9	15	17	23	28	34	40	47







## Recommended settings in the simulation

The settings are provided as a guideline and may vary with your direct-drive base and cockpit position.

476° = recommended steering rotation (Vehicle Set / Soft-Lock) → chassis lock ≈ 17.2°.

If you can't dial 476° exactly:

480° → lock ≈ 17.3° (instead of 17.2°)

470° → lock ≈ 17.0°

You can use the 1080° rotation or AUTO mode, but it's preferable to set the rotation to **480° t**o ensure you're using the full capabilities of the **Ferrari 296 GT3 LM.**Use the same steering

rotation on your direct

drive base.









What does this feature allow you to adjust?

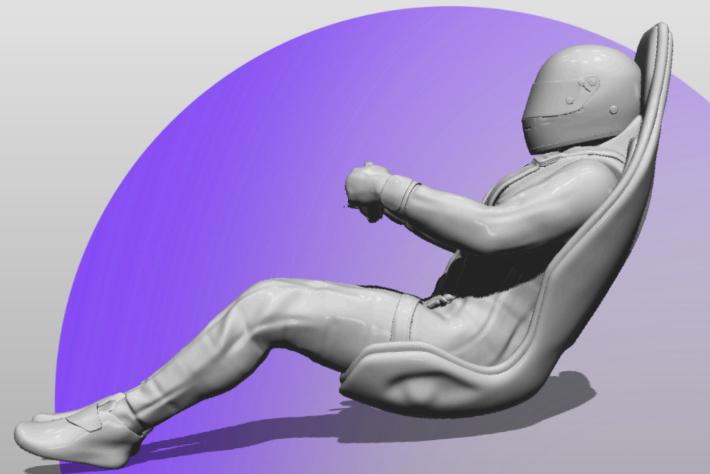
Adjusting the driver's position refines the game's force feedback, enhancing and balancing the effects.

**Adjust Seat Forward** 

**Adjust Seat Backwards** 

**Adjust Seat Up** 

**Adjust Seat Down** 



Seat Position 0 / 4\*

\* FOV Default 49

Steering Wheel



Caution! For better force feedback, please remove the steering wheel.





Seat Position	Tyre Pressures Kpa							
	FL	FR	RL	RR				
0/0	170.91	170.72	170.69	170,31				
0/0	170.11	168,68	168.76	167,70				
0/-4	173.26	173,47	172.60	172.35				
0/-4	171.65	171,19	170,07	169.03				
0/4	171.70	171.39	171,28	170.82				
0/4	172.74	171.78	169,59	168.59				

\* FOV Default 49 / First lap exiting the pits / Second lap in qualification mode.







Seat Position	Tyre Surface Temps C°							
	FL	FR	RL	RR				
0/0	71,1	70,9	63,5	61,2				
0/0	76,9	78,5	67,6	64,9				
0/-4	70	69,9	65,5	63,3				
0/-4	83,1	82,5	70	66,3				
0/4	79,9	77,9	67,5	64,4				
0/4	90,4	88,9	71,7	67,4				

\* FOV Default 49 / First lap exiting the pits / Second lap in qualification mode.







Seat Position	Tyre Carcass Temps C°							
	FL	FR	RL	RR				
0/0	79,2	78,8	78,6	77,7				
0/0	83,4	82,5	81	78,8				
0/-4	82,1	82,1	81,2	80,3				
0/-4	85,3	84	82,7	80,2				
0/4	81,3	80,6	80,4	79,3				
0/4	88,88	86,7	83,3	80,5				

\*FOV Default 49 / First lap exiting the pits / Second lap in qualification mode.







Seat Position	Tyre Wear %							
	FL	FR	RL	RR				
0/0	1,371	1,470	1,076	1,071				
0/0	1,209	1,449	0,964	0,967				
0/-4	1,066	1,171	0,979	0,968				
0/-4	1,497	1,726	0,954	0,878				
0/4	1,577	1,584	0,942	0,862				
0/4	1,680	1,844	0,917	0,842				

\*FOV Default 49 / First lap exiting the pits / Second lap in qualification mode.







push lap.