



*automotive*  
*Simulation*



*A.S.* AUTOMOTIVE SIMULATION S.A.R.L. is an engineering and ergonomics company that specializes in design and handwork manufacture of racing simulator. Located in south-eastern France, we welcome you with no less than 5 teams of collaborators, including University of LUMINY for the research center. We are currently the most cost effective in the simulation field rental throughout Europe.

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Note :

[WWW.AUTOMOTIVE-SIMULATION.COM](http://WWW.AUTOMOTIVE-SIMULATION.COM)

# DYNAMICS SIMULATORS : 4 axis and 6 axis



Dynamic simulator 6 axis

Specializes in accelerations experienced, we offer a dynamic simulator 6 axis can you recreate the complex kinematics of acceleration that can occur when a person driving or piloting a car. This exceeds the complexity of our 5 senses. Evil immersed, the individual may be subject to nausea and dizziness another : such a simulator is described as dissonant. In the opposite case, it is called consonant, because it generates few complaints.

The simulation of piloting race car imposes considerably higher than the simple act of driving. We are now able to take them all into account and to facilitate immersion. Our simulators are not only consonant, they are RESONANT, as we grow the true sense, to give you full satisfaction.

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## DYNAMICS SIMULATORS FEATURES

	4 AXIS SIMULATOR	6 AXIS SIMULATOR
<b>Chassis</b>	Custom painted steel / double tubular spars	
<b>Acceleration</b>	240 single phase volts: weight: 300kg / 2.5 kW (Three phases 400V version available for other performances - see website). - <u>Tilt/speed/angular accel <b>Pitch et Roll</b></u> : $\pm 30^\circ$ ; $\pm 41^\circ/s$ ; $\pm 345^\circ/s^2$ - <u>Tilt/speed/angular accel <b>Yaw</b></u> : $\pm 90^\circ$ ; $120^\circ/s$ ; $600^\circ/s^2$ - <u>Mvt/speed/linear accel</u> : 0,5 m ; 0,345 m/s ; 2,9 m/s <sup>2</sup>	6 axis weight : 380kg / 240v 15amp / reactivity: 100hz - Size: 2,25 x 2 x H0,75m - <u>Tilt/speed/angular accel <b>Pitch, Roll, Yaw</b></u> : $\pm 24^\circ$ ; $\pm 40^\circ/s$ ; $\pm 500^\circ/s^2$ - <u>Mvt/speed/linear accel</u> : $\pm 150mm$ ; $\pm 300mm/s$ ; $\pm 0.6G$ (output shaft)
<b>Settings</b>	Seat depth and pedal depth	
<b>Steering wheel</b>	Wheel type track with rotor electromagnetic / pallets / 1080° (adjustable)	
<b>Shifter</b>	Shifter type crabot / 8 vit. type H or séquential (to specify)	
<b>Pedalboard</b>	Really pedalboard of track / 2 or 3 pedals (to specify)	
<b>Screen</b>	3x screens 24" 2D FULL HD - technology LED	
<b>Compatibility</b>	PC dedicated (included)	
<b>Software</b>	LFS S2	RFACTOR
<b>Solution</b>	Attraction / training / rental commercial	
<b>Shipping</b>	Included for the France only. Contact us for other country.	
<b>Guarantee</b>	1 year.	
<b>Price € HT</b>	From <b>37500 € HT</b> (6,5% discount)	From <b>65000 € HT</b> (6,5% discount)
<b>Option 3D</b>	3990 € HT (kit 3x screens 3D 24" 1080p + PC full 3D)	

# Frequently Asked Questions

## **What makes the difference between our dynamic 6 axis simulator and the other 6 axis simulators on the market?**

Our simulator functions with a high fidelity electromechanical platform that is fully electric (240 single phase volts). This solution makes it possible for us first to substantially reduce our production costs, and then to get very high performance and high reactivity (100hz). It works silently and maintenance is almost unnecessary. No hydraulic maintenance, noisy pumps, heat pollution or untimely overheating. It is especially adapted to closed environments and has several characteristics that make it secure.

## **What simulation softwares can be used with our dynamic 6 axis simulator?**

Our simulator is compatible with the following car race simulation software : RFACTOR (and all the cars from rfactorcentral.com!!!)  
For sure, you will find the vehicle that suits you best.  
You can even import your own telemetry to your vehicle.

## **Is our dynamic 6 axis simulator reliable enough to be used commercially?**

It is, that's actually why it was designed for hours and hours of consecutive use.  
Tests that are being carried out show that you can use it for more than 20,000 hours without any damage.

## **Is it possible to act on the power of the effects?**

Sure, thanks to a software dedicated to this.  
The algorithms that have been developed are really high fidelity.  
The other manufacturers demand very high prices to develop these algorithms. Ours are used in other systems of movement within the simulation.  
Our algorithms were studied in a doctoral thesis and are the strongest of the market. The accuracy and fidelity is so high that they can be accredited for full flight simulation.

## **Why is our dynamic 6 axis simulator the most competitive in terms of high fidelity?**

Our dynamic simulator is the most faithful, the most reliable and the most competitive. The system is so precise that it can be used in extremely accurate training applications or entertainment applications. The platform has been given some full flight simulator credits by aviation governing bodies. All the dynamic systems can't claim that.

## **Should I have any specific knowledge on the platform of our dynamic simulators?**

Concerning mechanical engineering or the electronic of movement, you nearly don't need any! We have taken care of everything relentlessly. Basic knowledge in computer is enough. But if there is a problem, please contact us.

## **What about the guarantee on our dynamic 6 axis simulator?**

The guarantee of the system lasts 12 months, with the replacement of the faulty part(s). After the 12 months' guarantee, we still supply the parts. The parts will be invoiced. But in case of manufacturing defect, we will pay the expenses. More precisely, the following points have to be taken into account:

- the guarantee covers the manufacturing defects and faults.
- the guarantee doesn't cover the faults in the components due to wear.
- the guarantee doesn't cover the faults in the components due to misuse.

## **How long does it take to get our 6 axis simulator?**

It takes from 6 to 13 weeks, from the validation of the order to receipt. It depends on the number of orders currently under construction.

## **Is our 6 axis simulator adapted to professionals?**

Our simulator has been devised for them. It takes the professional pilots' demands into account. The piloting device will make you feel the same sensations as the true experience: you will feel how hard the steering wheel, hard braking and point of hardness of clutch are. The device can be set in many ways, concerning the adjustments. It is an indispensable complement in the training in driving sports. It gives a realistic simulation of the force you experience when driving. It uses the most advanced engines, with RFACTOR, IRACING. It is also possible for you to import your own telemetric data.

## **Is our 6 axis simulator bulky?**

On the ground it is about 7feet & 7inch x 6feet & 7inch large. It is approximately 6 feet & 7 inch high (platform + cockpit). The platform only : 2 feet & 8 inches. The cockpit only : 4 feet. It is so compact that it can be carried in any lorry or transport vehicle. The platforms weight approximately 6 cwt. The cockpit: < 2 cwt.

## **Is it possible to put a Formula One body, or even a Formula One?**

No, it doesn't make any sense. The body is a casing whose design has been studied in terms of aerodynamism. And this has nothing to do with such simulators.

**"OK, but this makes the identification process with Formula One products easier, doesn't it?"**

This is precisely what we want to avoid. This is just a subjective representation which may influence the way we feel the experience. ("I expected something else..."). This is another dissonance effect.

So, putting a complete Formula One on our platform doesn't make any sense, as the inert mass that must be moved is multiplied by 8! This means that the power of our platform has to be multiplied too, together with the budget.

## VALUE SAFE FOR PROFESSIONALS

You want to buy our dynamic simulator 6 axis 2D to intend to use a commercial lease. You plan on 1 year profitability (return on average). You make it available to your customers 5/7days, 8H/day (18h-2h). A total of 2,086 hours of rental for the year. Your need is rental of 31 € HT/hour (65000 € HT/2086 hours), 37 € TTC/hour.

For example, you also want to reap a profit margin of 65000 € HT/year/simulator. Your rental need is twofold: to end your rental cost is 74 € TTC/hour or 37 € TTC/30mn or 18.5 € TTC/15mn yet.

This demonstration you shows a need rental up to 5 times cheaper than our competitors for a solution equivalent dynamic simulation, and a higher return on sales. Sensations, reliability, and respondent in our service more.

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## AVAILABLE IN ALL EUROPE

- For any specific technical nature, please contact our :
  - tel : 04.42.46.09.23.
  - email: [infocontact@automotive-simulation.com](mailto:infocontact@automotive-simulation.com)
- For any application related to an ongoing project, contact our designer :
  - mobile : 06.25.78.05.05.
  - email: [davidlalanne@automotive-simulation.com](mailto:davidlalanne@automotive-simulation.com)

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## SIMULATION OF ROOM DEDICATED

- You want to have multiple simulators to organize sessions of race? You'll need a center dedicated server for each simulator and a management terminal to manage your entire fleet.
- Our employees, including their specialty is exercised in the world, may offer a solution tailored precisely to your needs and your organization.
- For more information :
  - email: [infocontact@automotive-simulation.com](mailto:infocontact@automotive-simulation.com)
  - tel: 04.42.46.09.23 / Port: 06.25.78.05.05.
  - Fax: 04.42.46.09.23

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