Car Universal Sensor (AUS) System
Using production vehicles for driving simulation

Thanks to cutting-edge technology, it is now possible to easily transform production vehicles into driving simulators. High-tech sensors are used to transmit controller readings, while the gas pedal, brakes and steering system are integrated in the simulation software in order to transform a production car into a driving simulator.

Advantages of VR-AUS Set 2015:
- The sensors are small and mounted in such a way that they cannot be seen
- The sensors are easy to install, even for persons without any specific training
- The sensors are self-calibrating
- Power is supplied via a 12V outlet; thus, the sensors do not need batteries
- The black box receives the data from the vehicle compartment and is connected with the rotary pads; the data are transmitted to the computer via the USB game controller.

The controller requires a standard 230V outlet.

Scope of Supply
Sensor box, a pair of rotary pads, four inertial sensor modules (gas pedal, brake, gearshift for forward/neutral/reverse, steering wheel) as well as the necessary wiring in order to equip a vehicle with the handling characteristics of a car with automatic or manual transmission and to be able to connect to a simulator. The components are packed in an aluminum carrying case, complete with instructions for installing the sensors.
**CS 160° Comfort Front** *(alternative 180°)*

2D & 3D Video Display

Functional presentation with 160-degree display. An adjustable curved display that is suited for most types of vehicles smaller than trucks is set up in front of the vehicle. Two projectors that deliver full HD resolution provide an impressive picture over the entire screen. The Comfort version includes a projection screen, which is adjusted to the desired size using remote controlled electric motors, PC and sound system.

**CS 160° Comfort Front** *(for car/van/truck)*

Curved projection screen on pedestal with adjustable legs, extendable at the touch of a button thanks to 3 built-in electric motors, *(optional remote control, not included)*, digital display of the adjusted height, including 2 projectors (2D & 3D) with brackets, 3 electric motors, control electronics, pushbutton switch, Warp software, PC and sound.

Dimensions: (WxHxD) approx. 260x165x100cm
Min. height: approx. 165cm, max. height: approx. 230cm
Screen: (WxH) approx. 260x100cm on pedestal 65cm
Weight approx. 100kg, 230 V

**Optional: CS 160° Standard** *(for car simulation)*

Curved projection screen on adjustable legs, not movable (variable sizes), including 2 projectors (2D & 3D) and brackets, Warp software, PC and sound.

Dimensions: (WxHxD) approx. 260x165x100cm
Min. height: approx. 165cm, max. height: approx. 210cm
Screen: (WxH) approx. 260x100cm on pedestal 65cm
Weight approx. 60kg, 230 V

**OFFER A: VR-AUS Set 2015:**

Package consists of:
"Car Universal Sensor System" and "CS 160° Standard (for cars)"

**OFFER B: VR-AUS Set 2015:**

Package consists of:
"Car Universal Sensor System" and "CS 160° Comfort Front (for cars/van/truck)"

**Production time:** Delivery time: approx. 8-10 weeks

**Optional: Setup on vehicle**
within Germany (1 man-day, including travel expenses)

**Optional: your car parcour / city traffic / racing circuit**

**Optional: with traffic school software in different languages**

**Optional: with cockpit analogue**
Car Universal Sensor System for use of production vehicles for driving simulation fulfills the following requirements:

Advantages of wired systems:

- Best handling
- Fastening and calibration in just 3-5 minutes
- Sensors from the steering wheel, gas pedal, brake, manual or automatic gearshift are connected with the black box via a small, thin wire (sensors on wiring invisible; the steering wheel sensor is mounted on the back of the steering wheel. The sensor can be seen if you look at the back of the steering wheel; it is also visible on the gearshift. The sensors are easy to install, even for persons without any specific training; the sensors are self-calibrating.
- Sensor wiring can be attached to the black box in any order. The wires are equipped with a significant black sheathing and can be routed, e.g., using Velcro fasteners.
- Calibration of sensors at the touch of a button or automatically. The button on the housing can be used to put the system in calibration mode after installation in the car, during which the electronic module measures the corresponding travel from zero position to the end of the scale during the actuation of the pedals, gearshift and steering wheel in order to scale the readings for output to the computer and to recognize the relevant switching points. The calibration mode is ended by means of a button or automatically after a defined period of time.
- Implementation of manual or automatic transmission: 1st gear or shift up = forwards 2nd gear or shift down = reverse
- Effortless steering via both wheel pads (not wired), which decrease wheel resistance. The steering angle is reduced via the steering wheel.
- Power is supplied via a 12V outlet; thus, the sensors do not need batteries
- The sensor box is supplied with power via the USB connection, the length of the connecting cable between the sensor box and PC can be extended by using active extensions in accordance with USB-typical lengths.
- The electronic module for the passenger compartment of the simulator vehicle analyzes the position of the wired sensors. The main USB cable is led out, e.g., at the door and runs to the simulator PC.
- The controller requires a standard 230V outlet.

Optionally we offer you different programs as simulation software for the VR-AUS Set 2015 in simulation as well as software tailored specifically to your vehicle fleet for city driving or for race tracks:
**VR-AUS-CI Vehicle Simulation Software (Package 1)**
With this set (interchangeable software), you are able to drive a wide variety of vehicles on the most popular race tracks. You can select between a city street circuit, Formula 1 or rally. 
Set consists of: Shuttle/PC, wireless keyboard & mouse, software: GTR 2
Optional: Colin McRae3, LFS, Race07

*Optional: GTR2 in 3D / other 3D games available on request*

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**VR-AUS-CI Vehicle City Traffic Simulation (Package 2)**
Vehicle simulation geared specifically for your own fleet of vehicles. Vehicle performance is matched in particular to the respective models. 
**Scenery:** The physical performance of the respective car model is simulated. The driver has a realistic impression of the performance characteristics of the selected vehicle (without cockpit view). The exterior view of the respective car model can be switched by means of a shortcut key (pursuit camera). Driving time is not limited but may be specified as desired or set, e.g., to 2-3 minutes per person for an event. Other vehicles can be added for city driving in order to simulate additional traffic.

Delivery time: approx. 8-10 weeks

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**VR-AUS-CI Vehicle Race Track Simulation (Package 3)**
Vehicle simulation geared specifically for your own fleet of vehicles. Vehicle performance is matched in particular to the respective models. 
**Scenery:** The physical performance of the respective car model is simulated. The driver has a realistic impression of the performance characteristics of the selected vehicle (without cockpit view). The exterior view of the respective car model can be switched by means of a shortcut key (pursuit camera). Driving time is limited to 2-3 minutes. The driver experiences the selected car model while racing along a race circuit with long straightaways and a wide variety of curves and chicanes. The race track and even the buildings can be branded at your request. Other vehicles can also be added to the circuit and can overtake one another.

Delivery time: approx. 8-10 weeks

All prices are quoted net in euro without the applicable VAT. 
Delivery: approx. 2 months depending on package