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“Our research simulators allow us to create precise scenarios and use them repeatedly with a wide variety of patients. This repeatability across a broad sample helps in our research and limits the uncontrollable variables that exist on the open road or even in a parking lot.”

–MARC SAMUELS
OT, CDRS, Palo Alto Health Care System

RS 150

OUR ENTRY-LEVEL DESKTOP RESEARCH DRIVING SIMULATOR

The DriveSafety RS-150 Research Simulator is designed for use in part-task simulations and in scenario validation in conjunction with DriveSafety’s HyperDrive Scenario Authoring Tools. Researchers create their ideal driving scenarios by leveraging DriveSafety’s extensive library of roads, intersections, vehicles, traffic patterns and landscapes, plus the ability to script specific actions and to collect the desired data. The RS-150 can be used on most standard desktops.

Used for innovative research
in academic and commercial
laboratories



System Highlights

Visuals

The simulator features realistic driving environments and smooth, high-performance graphics. Roadways and traffic control devices are geometrically correct and modeled to highway design standards. The system's realistic vehicle dynamics are essential for simulating the driving experience.

Autonomous and Scripted Traffic

The driving simulator can simulate autonomous interactive ambient vehicles in the environment. Vehicles are created and controlled by the system with no scripting or user input required. These vehicles obey traffic laws, signs and signal devices, and interact realistically with other vehicles based on human behavior models and real-time physics-based vehicle dynamics. If specific behavior is desired, vehicles can be given script commands through the use of triggers, timers, paths, routes and other tools.

Scenario Control

When paired with DriveSafety's HyperDrive™ Scenario Authoring tools, authors can control traffic signals, ambient traffic, scripted traffic, roadway friction, weather conditions, etc. Through the use of triggers, virtually any scenario can be designed. Whether it is human behavior, in-vehicle device usability studies or interior cab design, the simulator scenario control provides customization needed.

Data Collection

Real-time data collection capabilities make it possible to collect a wide range of data at rates up to 60 Hz. Over 80 standard performance measures are provided. In addition, users can define 25 of their own measurement functions. The simulators support the integration with third-party data collection hardware including eye trackers, physiological measurement devices, and external input/coding systems. Collected data is coded and organized into files that are ready for analysis with off-the-shelf statistical analysis packages.



What's Included:

- Three 19" LCD screens, each with 1920 x 1080 resolution
- Sharp, high-resolution [retina-limited] visual displays and 110 degree field of view
- Real-time rear and side view wide angle mirrors
- Commercial 900 rotation steering wheel with dynamic electric torque feedback, and foot pedals and shifter
- Driver input and control buttons
- High-quality sound system
- Runtime simulation software, system computers, and accessories
- Includes shipping, installation, half day onsite training and 1 year of support
- RS-150 is often bundled with the separate HyperDrive™ Authoring Software and Workstation to make a complete scenario development and testing environment

Specs

- Dimensions: 4' L x 3' W
- Weight: 250 lbs [113kg]
- Power Requirements - [1] 20 Amp 115 Volt AC circuit
- Operating Temperature - 50°F to 104°F [10°C to 40°C]

DriveSafety Hyperdrive Authoring Suite

To take full advantage of the RS research driving simulators, they are typically combined with DriveSafety's separately available HyperDrive Authoring Suite, an advanced scenario-authoring tool. The suite allows researchers to create custom driving scenarios leveraging an extensive library of roads, intersections, cultural surroundings, traffic vehicles, pedestrians and other elements along with flexible scripting capabilities. The system also includes powerful real-time data collection and performance monitoring functions users can customize to suit the specific needs of their studies.



FOR MORE INFORMATION, PLEASE CONTACT
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