Static Simulator (aVDS-S)
A compact, highly immersive, driver-in-the-loop simulator

The static simulator from AB Dynamics is a class-leading solution that takes components from AB Dynamics' proven third-generation simulator to provide a cost-efficient way to reduce the cost and time of automotive system development through DiL simulation.

The aVDS-S is supplied with the AB Dynamics Simpia toolchain which allows data to be shared between virtual and real-world testing in a seamless manner and precisely correlate the results. It contains an integrated flexible interface that works with most vehicle, steering, tyre and sensor model types and industry-leading virtual content from rFpro is provided as standard. A number of haptic feedback systems are available including active brake pedal, active seat and AB Dynamics' high-fidelity, low cogging, steering force feedback system.

Features

- High stiffness driver console and user configurable digital dashboard
- AB Dynamics' Simpia toolchain allowing sharing and correlation of track and lab data
- Driver console with user configurable digital dashboard.
- A range of haptic feedback and visual display options.
- Integrated electronics
- Compact in size, easy to install
- Industry-leading virtual content from rFpro
Display Options

Standard visuals are provided by a single simulator-grade ultra high definition monitor with 144Hz refresh rate suitable for use in daylight conditions. The optional triple screen configuration provides the wrap around visuals which are ideal for ADAS work. Other display options include the use of augmented reality headset or a user specified projection system with screen.

Display options include:

D1. Single 64.5” monitor system mounted directly to the aVDS-S chassis
D2. Three 64.5” monitor system with additional graphics PC and rFpro licenses
D3. Projection system
D4. Augmented reality headset

Haptic Feedback Options

Haptic feedback systems provide increased driver immersion. The following options are available for use with the aVDS-S:

C1. aVDS-SR15 active steering force feedback system
C2. aVDS-SR30 active steering force feedback system
C3. Active seat for sustained lateral cueing
C4. Active brake pedal

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Chassis dimensions</td>
<td>1910mm x 620mm</td>
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<tr>
<td>Installed dimensions (single screen)</td>
<td>1973mm x 1448mm</td>
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<tr>
<td>Installed dimensions (triple screen)</td>
<td>3083mm x 1973mm</td>
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<tr>
<td>Chassis mass</td>
<td>&lt;150kg</td>
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<tr>
<td>Power requirements</td>
<td>Single phase 110VAC/240VAC, 4kW supply</td>
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<tr>
<td>aVDS-SR15 Steering actuator</td>
<td>Peak torque: 35Nm, 15s hold torque: 15Nm.</td>
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<td>No load maximum speed: 2000°/s</td>
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