Immersion

Haptic Workstation™

The Haptic Workstation is a ground-breaking 3D haptics innovation from Immersion® Corporation. It is a fully integrated simulation system providing right and left whole-hand force feedback, immersive 3D viewing, and easy-to-use CAD model manipulation and interaction software. Using the Haptic Workstation, you can "feel" what it's like to sit inside your car design and "hang" both hands on a graphical steering wheel before building a costly prototype.

Turnkey 3D Simulation Platform.

The Haptic Workstation represents the culmination of more than 10 years of research and development synergistically brought together in a single 3D-interaction product. It is a general purpose, turnkey simulation platform providing haptic feedback to both hands, as well as providing interaction software and immersive 3D viewing. The Haptic Workstation is perfect for automotive and aerospace companies who want to experience their digital prototypes "first hand" before building costly and time-consuming physical prototypes. It is also the ultimate tool for researchers wanting to study virtual reality, simulated training, telerobotics and 3D interaction.

The Haptic Workstation includes right-hand and left-hand CyberForce® whole-hand haptic-feedback systems mounted behind you on vertically adjustable columns which can be configured for both seated and standing applications. The CyberForce systems apply ground-referenced forces to each of the fingers and hands. For seated applications, the Haptic Workstation comes with an adjustable automobile seat. Such a configuration is ideal to run Immersion's "Digital Seating Buck" application (Figure 1) which simulates various components of an automotive dashboard, including the steering wheel. This application allows you to evaluate the ergonomics and reachability issues of a car interior. Potential standing applications include workcell layout analysis, engine maintenance simulation, and medical procedure training.

Immersive 3D viewing is provided by a head-mounted display. Alternatively, the Haptic Workstation has been designed to minimize frontal visual obstructions to permit use in a CAVE or other projection screen viewing environment. Immersion's VirtualHand® for V5 software allows you to easily load CATIA and other 3D CAD models and manipulate and feel them with your hands.

Immersion has a trained staff of 3D-interaction experts ready to assist you in developing your own custom applications for the Haptic Workstation. Please contact us for more information on how the Haptic Workstation can help you exceed your 3D simulation goals.

Features

- Right-hand and left-hand CyberForce systems, customized to operate over your shoulder
- Support structure with vertical adjustability for sitting and standing applications.
- Head-mounted display with head tracker for immersive 3D viewing. Also can work in a CAVE or other projection screen viewing environment.
- VirtualHand for V5 software that loads CATIA and other 3D CAD models for immediate intuitive manipulation.
- 3D simulation computer
- Adjustable automobile seat

About Immersion Corporation

Founded in 1993, Immersion Corporation develops hardware and software technologies that improve the way people interact with computers. Immersion's 3D Interaction products include the CyberGlove® line of whole-hand motion capture and haptic feedback products that enable wearers to use their hands to interact with and manipulate 3D graphical objects.

For more information

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Figure 1: Haptic Workstation running the "Digital Seating Buck" application.