



HAPTION

Virtuose 6D
HIGH FORCE



Technical characteristics

The VIRTUOSE 6D High Force is the only force-feedback system of the market today, which offers the following characteristics. It was made to answer high-end applications which require higher forces, such as teleoperation control.

Instead of focusing on giving the highest force possible with the mechanics, we chose to offer a real balance on the whole workspace. Therefore, we can provide our users with the same level of force, up to 70N, in the whole workspace.

- ✓ Force-feedback on all 6 degrees-of-freedom (3 translations and 3 rotations)
- ✓ Operational workspace corresponding to the movements of a human arm
- ✓ Length of the segments constituting the arm: 400 mm, 450 mm or 500 mm
- ✓ Maximum force 70N (30N continuous), i.e. high enough to simulate the handling of heavy objects
- ✓ Maximum rotation torque of 5 Nm (1.4 Nm continuous), i.e. high enough for two-handed handling of large virtual objects
- ✓ Exact static compensation of the device's own weight
- ✓ Modular end-effector equipped with programmable switches
- ✓ Gripping tool equipped with a proximity sensor, connected to a "dead-man" function
- ✓ Reduced weight, transportable without specific equipment
- ✓ Development kit (API) available for the major operating systems
- ✓ Can be delivered with the TAO package
- ✓ Demonstrated compatibility with the major software applications on the market today, using dedicated plug-ins: Vortex™, Havok™, ODE, 3DVIA Virtools™, Catia™ V5, Delmia™ V5, Solidworks, ESI/ICIDO, H3D, OpenMask, WorldViz Vizard, Classic Jack, etc...
- ✓ Compatibility with tracking system like ART, Vicon, Motion Analysis

The Virtuose 6D High Force is a 6 degrees-of-freedom haptic device, designed for work in Virtual Reality and remote handling environments.

Thanks to its large workspace and its high forces, it enables a scale one interaction with digital models coming from CAD and live control of robots.