



HAPTION

Virtuose 6D TAO



The Virtuose 6D TAO is a 6 degrees-of-freedom haptic device, specifically designed for Tele-Operation application.

Thanks to its large workspace, high forces, and input interface, it enables a scale one interaction with large slave arm.

Its main applications are:

- Master arm
- large interaction
- tele-operation
- Human gesture

## Technical characteristics

The VIRTUOSE 6D is the only force-feedback system of the market today, which offers the following characteristics:

- ✓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 between 34N and 42N (9,5N to 12N continuous), i.e. high enough to simulate the handling of heavy objects
- ✓Maximum rotation torque of 3.1Nm or 5Nm (1Nm or 1.4Nm continuous), i.e. high enough for two-handed handling of large virtual objects
- ✓Exact static compensation of the device's own weight
- ✓Gripping TREH (TeleRobotic Ergonomic Handle), design for Master & Slave operation, integrating a dead man function
- ✓Button box : 4 buttons, switch to froze the gripper
- ✓Ethercat or Ethernet UDP interface
- ✓Reduced weight, transportable without specific equipment
- ✓Development kit (API) available for the major operating systems
- ✓Demonstrated compatibility with the major software applications on the market today, using dedicated plug-ins: TAO 2000, ISPI, Vortex™, Havok™, ODE, 3DVIA Virtools™, Catia™ V5, Delmia™ V5, Solidworks, ESI/ICIDO, H3D, OpenMask, WorldViz Vizard, TechViz XL, Classic Jack, etc...