OpenHaptics Technical Specifications for Windows

Hardware

- Dual Xeon® Pentium® IV 2.4 GHz or better processor or higher
- 512 MB free disk space
- 2 GB RAM
- Depending on Phantom model: Parallel Port (EPPMode port built into the motherboard or an Axxon parallel adapter card is *recommended*) or FireWire 1394a* or a 10/100Mbps compatible Ethernet adapter

Laptop Computers

- Interfaces have not been fully tested on laptop computers.
- In general, PCMCIA cards seem to retain connectivity better than express cards.
- Please make sure to follow the manufacturer's instructions and use the most up-to-date driver for whichever card is chosen.
- Software: Windows XP-32 (SP3), XP-64 (SP2), Vista-32 (SP2), Vista-64 (SP2), or Windows 7, (win32 or x64)
- Compilers: Microsoft Visual C++ 2005 (SP2) or Visual C++; 2008 or Visual C++ 2010
- May require recompiling HDU and HLU Utility libraries
- Drivers: Phantom Device Driver 5.1.7 or above
- One of the supported Phantom haptic devices. Please note that PCI-based Phantom Premium devices are not supported.
- Phantom Omni (FireWire IEEE 1394a)*
- Phantom Desktop (Parallel Port or LAN port)
- Phantom Premium 1.0, 1.5, 1.5 High Force, 3.0 (parallel port or LAN port)
- Phantom Premium 1.5/6DOF, 1.5HF/6DOF, 3.0/6DOF (parallel port)
- NOTE: the Phantom Communication Converter (PCC) is available for parallel port devices to be used with a FireWire interface.

OpenHaptics for Linux

Hardware

- Dual Xeon Pentium IV 2.4 GHz or better processor or higher. To interface with the Sensable Desktop or Premium devices, EPP mode parallel-port built into the motherboard is required.
- 512 MB disk space and 2 GB RAM.

Software

- Ubuntu 11.1 and Fedora 16 (or later)

- Kernel 3.3.0 or higher
- Mesa-OpenGL® with GLX interface to the X Window System. Make sure that "glxgears" runs on your system.
- GLUT-OpenGL Utility Toolkit
- MesaGLw-Mesa Widget Library. Requires the Motif bindings (built with ./configure -- enable-motif)
- FreeType2-Portable font engine (http://www.freetype.org)
- Compilers: gcc 4.x
- Drivers: Phantom Device Drivers v 4.3-2* or above

*To find kernel version type "uname -r" at the terminal. For additional questions, check the online documents at the Developer Support Center or post questions to the developer forums.

Supported Phantom models:

- Phantom Omni (FireWire IEEE 1394a)*
- Phantom Desktop (Parallel Port)
- Phantom Premium 1.0, 1.5, 3.0 (Parallel Port)
- Phantom Premium 1.5/6DOF, 3.0/6DOF (Parallel Port)

Please note that the following configurations are NOT supported:

- High-force Phantom Premium devices
- Phantom Communication Converter
- Dual Phantom Configurations
- PCI-based Phantom Premium devices

Download from the Sensable Developer Support Center (DSC).
* The Phantom Omni device is IEEE 1394a compliant. However, Sensable is aware of customers that have experienced performance difficulties with their Phantom devices when using controller cards with certain IEEE 1394a chipset or driver combinations. In these cases, it may be necessary to update or change the 1394 controller card driver or to try a separate add-on 1394 controller card.

Proper operation and control of the Haptic Servo Loop requires sufficient "real-time" performance of the host computer. Under Windows, to measure the system latency on your computer, please use the DPC Latency Checker, available at TheSyCon website. If the red bars appear regularly more often than every 5-7 seconds, please consider updating your BIOS, chipset firmware, system devices or other device drivers.

Such a low-level system update may also be in order in cases where the FireWire or Parallel communication with the Phantom device hangs or is inconsistent or intermittent; or when the whole operating system has been upgraded - from XP to Windows 7 for example.