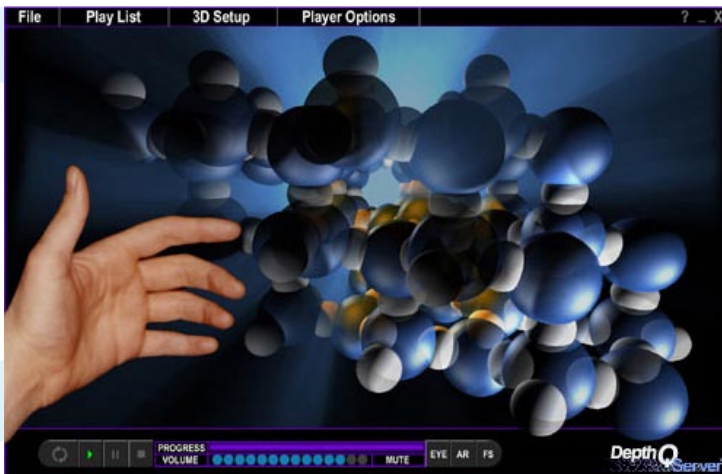


DepthQ[®] Server[™]

DepthQ[®]Server[™] for Stereoscopic Media

is a feature-packed software solution for the playback of stereo 3D movies from a standard off-the-shelf PC. Easy to use and designed from the ground up as a professional product, DepthQ[®]Server[™] provides flawless playback for the most perfect, comfortable-to-view stereo 3D experience possible.

DepthQ[®]Server[™] allows cost-effective delivery of high-resolution media to 3D theaters, museum exhibits, portable theaters, motion simulators, corporate events, and trade shows.



Screen capture of DepthQ[®]Server[™] software in windowed mode

Technical Description

DepthQ[®]Server[™] is available in three configurations: **Standard Definition** (up to 800x600 per eye), **High Definition 720P** (up to 1280x720 per eye), or **High Definition 1080P** (up to 1920x1080 per eye and beyond). Each configuration is capable of displaying flicker-free stereoscopic 3D video, the equivalent of two simultaneous streams of 2D digital video. For example, an HD 3D film made up of two separate streams of 1920x1080 would be stored in a concatenated stereoscopic format (e.g. above/below) at a resolution of **1920x2160**.

When played back, DepthQ[®]Server[™] displays your film in the highest quality stereoscopic format - progressive "page flip" (frame sequential) - at refresh rates up to 120 Hz. What makes this impressive level of data transfer possible on a common desktop computer is a combination of exceptionally well-crafted code and Lightspeed Design's proprietary image compression/decompression algorithm, the DQ3D codec.

Additionally, DepthQ[®]Server[™] supports both *single* and *dual* graphics output pipelines. Single output pipelines are for display (using active shutter glasses) with single-lens projectors like the DepthQ[®] HD 3D projector (pictured, above right) as well as CRTs and 3D-ready plasma screens, LCD monitors, and rear-projection DLP[®] monitors. *Dual* output pipelines are for display with two-projector passive displays (using polarizing glasses).

As powerful as it already is, the image display quality of DepthQ[®]Server[™] will continue to advance with each improvement in off-the-shelf computer technology. We are currently testing even higher resolutions and frame rates, and this power is being harnessed to drive truly amazing high resolution 2D displays as well as advancing the state of the art in stereoscopic 3D display.



DepthQ[®]Server[™] operates under Windows XP[®] on a standard PC equipped with an OpenGL graphics accelerator card (with support for quad-buffered OpenGL stereo). It can stream left and right eye video information in either a dual pipeline for two-lens projection or in a single pipeline for single-lens projectors such as the DepthQ[®] HD 3D stereoscopic.

Lightspeed

Lightspeed Design, Inc.
1611 116th Ave NE, Suite 112
Bellevue, WA 98004 USA
206.784.1385

lightspeeddesign.com • www.depthq.com

Technical Features

- ◻ Primary display output: progressive OpenGL quad-buffered frame-sequential "page-flip" (Analog RGB, Digital DVI)
- ◻ High Definition (HD): Full resolution per eye up to 1920x1080 30 frames per second and beyond, display up to 120Hz. (See general system requirements below)
- ◻ Standard Definition (SD): Full resolution per eye up to 800x600 @ up to 60 frames per second, display at up to 120Hz.
- ◻ Wide variety of data and compression formats: DQ3D (HD Only), H.264/MPEG-4 AVC, MPEG-4, MPEG-2, DV, MJPEG, uncompressed, etc.
- ◻ Full-featured player interface, includes advanced playback controls and playlist support
- ◻ Single pipeline output for active displays such as single-lens DLP stereoscopic data projectors, CRTs, and 3D-Ready monitors
- ◻ Dual pipeline output for passive displays based on stacked video projectors, LCD or DLP
- ◻ Full-screen and windowed stereoscopic display mode support
- ◻ Real-time zero parallax plane adjustments (vertical and horizontal).
Two methods are included, a traditional zero parallax-based adjustment and a guided infinity-based parallax adjustment.
- ◻ Support for advanced multi-channel sound: Dolby Digital 5.1 channel
Sampling frequency: 44,100-48,000 kHz. Digital AES/EBU Analog XLR
- ◻ Stereoscopic media input formats supported: above/below, above/below for sync-doubling (with adjustable separation), relaxed or cross-eye (Side by Side), interlaced, autostereoscopic*, etc.
- ◻ Support for still stereoscopic image visualization (JPG, BMP)
- ◻ Additional output formats: Support for a wide range of hardware independent stereoscopic output formats: interlaced, above/below for sync-doubling (with adjustable separation), relaxed or cross-eye (Side by Side), and a variety of anaglyph.
- ◻ On-the-fly conversion of interlaced stereoscopic DVD (TV formatted) or MPEG-2 data to any supported output display format at playback. (Direct playback from DVD not supported at this time)
- ◻ Support for a wide variety of display formats: DLP and LCD projectors, CRT monitors with LCD shutter glasses, checkerboard displays, line-blanking hardware, synchronization doubling hardware, plus autostereoscopic monitors*

General System Requirements

Standard Definition (SD)

Up to 800x600

Nearly Any Contemporary PC utilizing
Single or Dual-Core CPU

Data Storage: single SATA/IDE drive
Typical capacity: 80-750 Gigabytes

Windows XP® Pro (Vista not supported)

OpenGL graphics card with support for
quad-buffered OpenGL stereo: nVidia® Quadro
FX1500, FX3700 or better[‡]

One free USB port for HW key

High Definition (HD)

Up to 1920x1080 +

Nearly Any Contemporary PC utilizing
Dual or Quad-Core CPU

Data Storage: SATA/IDE or SCSI disk array
Typical capacity: up to several Terabytes

Windows XP® Pro (Vista not supported)

OpenGL graphics card with support for
quad-buffered OpenGL stereo: nVidia® Quadro
FX1500, FX3700 or better[‡]

One free USB port for HW key

Pricing

DepthQ®Server™ SD (Up to 800x600 per eye) US \$395.00[‡]

DepthQ®Server™ HD-720P (Up to 1280x720 per eye) US \$995.00[‡]

DepthQ®Server™ HD-1080P (Up to 1920x1080 and beyond) Call for Pricing

* Autostereoscopic support not included with basic package.

‡ FX1700 does not support frame sequential page-flip output.

◊ System requirements vary depending on output resolution.

‡ When purchased with a DepthQ®-WXGA HD 3D video projector.



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