

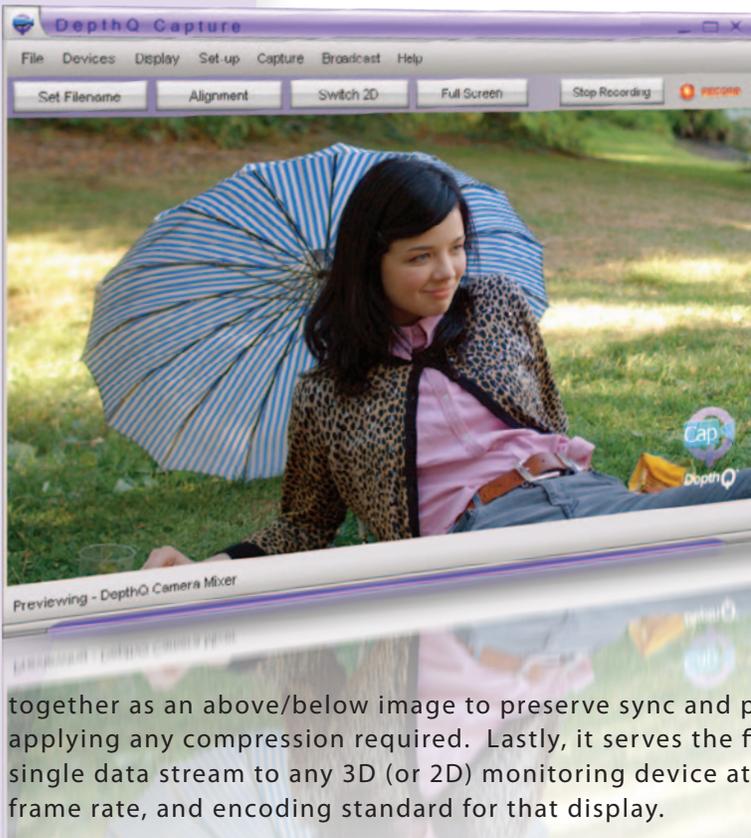


Precision HD **3D**

From *Lightspeed* DESIGN

## DepthQ® Capture™ for Stereoscopic Media

is a powerful software solution for the ingest, recording and monitoring of stereo 3D video from two camera inputs at up to dual HD resolution.



Features include low latency, real-time monitoring, a camera alignment aid and visual overlays to assist in optimizing your 3D effects for various target playback screens.

DepthQ® Capture™ ingests your two independent video sources (or single camera stereoscopic source), whether Analog, HD-SDI, HDMI, FireWire or USB. It then concatenates them

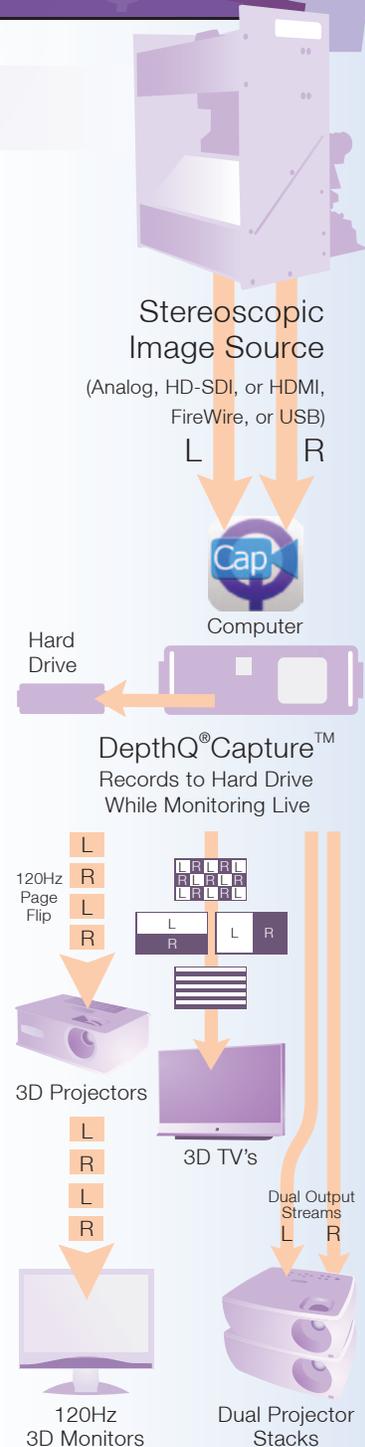
together as an above/below image to preserve sync and processes the result - applying any compression required. Lastly, it serves the final stereo data as a single data stream to any 3D (or 2D) monitoring device at the required resolution, frame rate, and encoding standard for that display.

For instance, if the 3D monitoring display is the DepthQ® HDs3D-1 video projector, DepthQ® Capture™ transforms the input to the required 1280x720 resolution in a frame-sequential (L-R-L-R) HDMI format at 120 frames per second.

Simultaneously, with the click of a button, DepthQ® Capture™ can record this stream to hard disk for later playback via DepthQ® Player™, or for editing and post-production in standard video processing software. The entire process - from capture through processing and delivery is accomplished with extremely low latency for critical realtime monitoring.

DepthQ® Capture™ code runs under both Windows® XP\* and Windows® 7, and supports Lightspeed Design's included DQ3D codec (as well as any other codec with adequate performance to capture dual stream full HD data).

\*At this time Lightspeed recommends Windows® XP for greatest stability.



Some of DepthQ® Capture™'s output flavors.



For more information please call +1.206.784.1385

www.depthq.com

## Technical Features

- ☐ Supports ingest as well as monitoring & recording up to High Definition (HD) 1080 30PsF (1920x1080) per eye, display refresh up to 120Hz.
- ☐ Accepts dual channel input via Analog, HD-SDI, HDMI, FireWire, or USB (dependent upon which capture card is purchased).
- ☐ Primary display output: progressive OpenGL quad-buffered frame-sequential "page-flip" (Analog RGB, Digital DVI).  
Optional display output: NVIDIA<sup>®</sup> 3D Vision<sup>™</sup> stereoscopic renderer (under DirectX and Windows<sup>®</sup> 7, additional NVIDIA hardware required).
- ☐ Wide variety of data and compression formats supported: DQ3D (included), H.264/MPEG-4 AVC, MPEG-4, MPEG-2, DV, MJPEG, etc.\*
- ☐ Full Screen and Windowed stereoscopic display mode support in Open GL mode, full-screen only in NVIDIA<sup>®</sup> 3D Vision<sup>™</sup> mode.
- ☐ Single pipeline output for active or passive 3D-ready displays and TV's such as single lens DLP<sup>®</sup> stereoscopic projectors, CRTs, plasma screens, LCD monitors and rear-projection DLP<sup>®</sup> monitors.
- ☐ Dual pipeline output for passive displays based on stacked video projectors, LCD or DLP<sup>®</sup> (nVidia<sup>®</sup> Quadro graphics card required).
- ☐ Includes **DepthQ<sup>®</sup>Player<sup>™</sup> PRO**, which provides a full-featured player interface, including advanced playback controls and playlists PLUS:
  - ☐ Support for a wide variety of single-channel stereoscopic media playback formats: above/below, above/below for sync-doubling (with adjustable separation), relaxed or cross-eye (Side by Side), interlaced, Tri-Delta, SIS, etc.
  - ☐ Support for real-time GPU pixel-shading via Cg code.
  - ☐ 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<sup>®</sup> 5.1 channel Sampling frequency: 44,100-48,000 kHz.  
Digital AES/EBU Analog XLR (third party audio decoder required).
  - ☐ DCP support. A non-watermarked version of the Jpeg2000 Decoder, the playback standard for Digital Cinema, is now available for an additional cost (playback speed and quality depends on the speed and quality of your computer).
  - ☐ Movie Time Code Editor: New automation functions include pre-programmed, time-based adjustments of IN/OUT points, parallax offsets, pause and volume within a movie using internal time code.

\*Some formats require the purchase of a third-party codec.

## General System Recommendations

**Computer:** Intel Core i7 based CPU (i7-950 or better)

**Motherboard:** Core i7 Motherboard (Asus P6T or similar)

**RAM:** 3GB DDR3 1333 RAM

**Data Storage:** Multi-disk RAID0 storage array (2 disk or more)

**Operating System:** Windows<sup>®</sup> XP Pro 32 bit

**Graphics Card:** One NVIDIA<sup>®</sup> Quadro<sup>®</sup> 4000 graphics card (or better) with support for quad-buffered OpenGL stereo (DIN-3 stereo sync required)

**Capture Cards:**

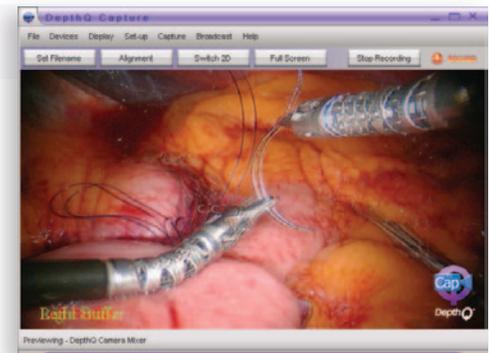
**SD:** 2x Osprey240e Capture Cards *Optimized for PCI Express<sup>®</sup>*

**HD SDI:** 1x Blackmagic Design Decklink Duo Capture Card

**HDMI, HD Component, SD Component, NTSC, PAL, S-Video:**

2x Blackmagic Design Intensity Pro Capture Cards

**Security:** One free USB port for HW key installation



DepthQ<sup>®</sup>Capture<sup>™</sup> in use with Intuitive Surgical's da Vinci<sup>®</sup> S HD<sup>™</sup> Robotic Surgical System

**Lightspeed<sup>®</sup>**  
DESIGN

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