



STEREO ENDOSCOPE SYSTEM

3D Scope that works with your existing HD camera

The Problem

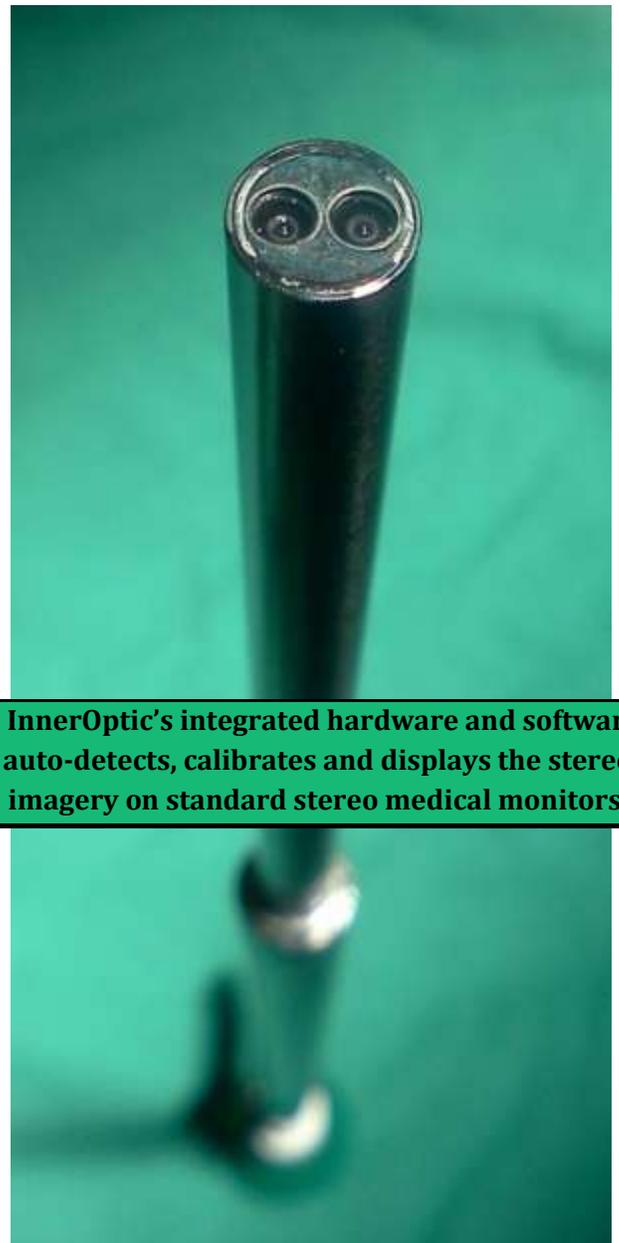
Traditional “2D” endoscopes restrict depth perception, impeding a surgeon’s ability to perform complex MIS procedures. 3D “stereo” endoscopy has been shown to save 7% procedure time by restoring the surgeon’s innate depth perception. However, all of the available 3D scopes have been integrated to expensive robots or require a significant investment in proprietary cameras.

Keep your stock of HD cameras and 2D scopes. Our 3D scope is compatible with the HD camera system that you already own.

An economical stereo system that could use both the great number of 2D scopes already available along with the HD camera systems already in the OR could solve this 2D and stereo 3D incompatibility problem.

InnerOptic’s Solution

InnerOptic’s patented stereo endoscopy system enhances the physician’s ability to easily, quickly and economically enter into the productive world of 3D endoscopy. Our system includes a 3D scope and a video-processing computer. The 3D scope (5mm and 10mm) has a standard endoscopic coupler, identical to your current 2D scopes, that snaps on just like a normal scope. Our computer captures video from standard HD camera systems from Storz, Stryker, Conmed/Linvatec and Olive Medical. Our software automatically detects if a 2D or 3D endoscope is in use and displays the calibrated video on standard medical stereo or mono “2D” monitors.



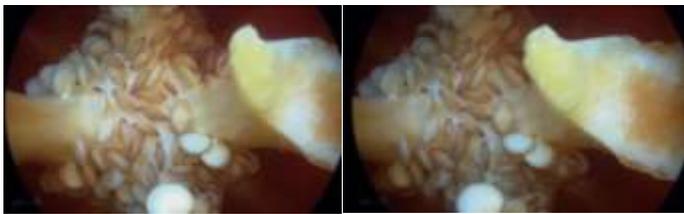
InnerOptic’s integrated hardware and software auto-detects, calibrates and displays the stereo imagery on standard stereo medical monitors.

Supported Interventions

InnerOptic's Stereo Endoscope System is available with either a rigid 5mm stereo scope or a rigid 10mm stereo scope, both of which are compatible with all standard HD cameras. Our 10mm 3D stereo scope is best suited for abdominal and GYN interventions. The 5mm scope is suitable for cranial, nasal and orthopedic use.

Benefits:

- Use your existing HD camera system.
- Use your existing 2D scopes (rigid and flexible).
- Swap back and forth between 2D and 3D scopes without changing cameras.
- Very low upfront and per scope cost.
- Auto detection of scopes.
- Auto-calibration of 3D stereo scope.
- Displays on standard medical stereo monitors.
- 5mm and 10mm rigid stereo scopes available.
- Dual tube design for wider left/right image separation



Left and Right images from our 10mm 3D stereo scope. Note the strong stereo separation.

About InnerOptic

InnerOptic Technology develops *3D guidance technology*, *optical medical devices*, and *visualization software*, thereby making image-guided procedures simpler and safer to perform. InnerOptic Technology was launched to commercialize breakthrough medical visualization technology developed at the University of North Carolina at Chapel Hill. InnerOptic has extended this technology with numerous patents in medical visualization and image-guidance. InnerOptic has close relationships with industry pioneers at UNC and the Carolinas Medical Center.

InnerOptic's Stereo Endoscope is not currently FDA cleared and is not for sale in the U.S. U.S. and foreign patents pending.

Copyright © 2012 InnerOptic Technology Inc. All Rights Reserved.

Specification:

Indications for Use: Abdominal and GYN for the 10mm scope; cranial, nasal and orthopedic for the 5mm

Display: Stereoscopic 3D monitor or standard monitor

Interface: Single 12" x 8" x 1.75" integrated computer that plugs into the back of your HD camera hub. Auto selects between standard 2D and 3D scopes.

Available 3D stereo Endoscopes (to Date):

1. 10mm rigid, 280mm long with 4.6mm IPD image separation, 90 deg FOV. Standard Endoscopy mount
2. 5.5mm rigid, 280mm long with 2.3mm IPD image separation, 90 deg FOV. Stepped shaft for rigidity. Standard Endoscopy mount.

Supported HD Camera systems* (to Date) :

3. Stryker 1288 HD camera system
4. Conmed/Linvatek IM4000
5. Olive Medical TCK1 HD and OVB1 controller
6. Storz "Image 1" H3

Supported Displays*:

1. Sony, medical 24" LMD-2451MT
2. Panasonic, medical 32" EJ-MDA32U-K
3. Non-medical pro and consumer stereo monitors



For More Information

Phone: 919 732-2090

Web: www.inneroptic.com

Email: info@inneroptic.com

