5DT VR MED – Upper GI
Virtual Reality Esophago-Gastro-Duodeno [EGD] Scope Training Simulator

Description
5DT VR MED – Upper GI is a Virtual Reality Training Simulator for upper gastrointestinal endoscopic procedures.

Benefits and Applications
* Safe virtual reality practice before reality-based training
* Ideal Teaching tool for development and practice of navigational and procedural skills
* Ideal Patient briefing tool to obtain better informed consent
* Ideal Research and Development [R&D] tool for evaluation of new procedures and/or instruments
* Automated evaluation

Features
* Use of real endoscope for maximum realism
* ERCP training module
* Pathology creation and placement tool
* Round (fiberscope) or square (videoscope) view

Realistic imagery
Biopsy training module
Gastroscope tip visualizer
Realistic transparent force-feedback model

Gastroscope tip visualizer
Biopsy training module
Pathology generator

5DT – Virtual Reality for the Real World! SM
How does the VR MED system work?

A standard gastroscope is instrumented with a tracking sensor at the tip, and a movement sensor at the insertion opening of the biopsy channel. The tracking sensor tracks the position and orientation of the gastroscope tip. The movement sensor tracks the relative insertion depth of the inserted biopsy tool. The data from these sensors is relayed to the host computer. The instrumented gastroscope is inserted into a life-size transparent silicone rubber model of the esophagus, stomach, and duodenum. The computer contains a three dimensional (3-D) computer graphics model of the esophagus, stomach, and duodenum. With the position and orientation of the gastroscope tip known, the computer now calculates the image that would have been seen with a gastroscope in a real patient. This image is displayed on the computer screen. The insertion depth of the biopsy tool is tracked similarly, and a simulated biopsy tool is shown in the image.

Options

5DT VR MED – Upper GI Full virtual reality training simulator. The system includes a computer, monitor, instrumented gastroscope, silicone rubber model and the software program.

5DT VR MED – Upper GI [Lite] This system is the lower-end version of the above. A virtual gastroscope tip is navigated on-screen with a computer mouse. No hardware included.

Associated products

5DT MM MED – Upper GI & Colon This multimedia program is an atlas of gastrointestinal endoscopy. It contains more than 300 images, with case histories, diagnoses, and classifications.

5DT VR MED – Broncho This virtual reality program teaches the trainee bronchoscopist how to navigate a bronchoscope in virtual lungs.

About 5DT

5DT <Fifth Dimension Technologies> is a high technology company specializing in Virtual Reality [VR]. 5DT develops, produces, and distributes affordable VR hardware, software, and systems. 5DT also develops custom systems for clients.

For more information please contact:

**United States and Americas**

Name: Jared Baer
Address: 5DT, Inc.
2005 De La Cruz Blvd. Suite 292
Santa Clara, CA 95050
United States of America
Tel: +1 408 748-1316
Fax: +1 408 748-1329
e-mail: info.us@5dt.com
Web: www.5dt.com

**Rest of World**

Name: Paul Ockers
Address: 5DT (Fifth Dimension Technologies)
25 De Havilland Crescent
Persequor Technopark
Pretoria, South Africa
Tel: +27 12 349-2690
Fax: +27 12 349-1404
e-mail: info@5dt.com
Web: www.5dt.com

*5DT – Virtual Reality for the Real World!* SM