

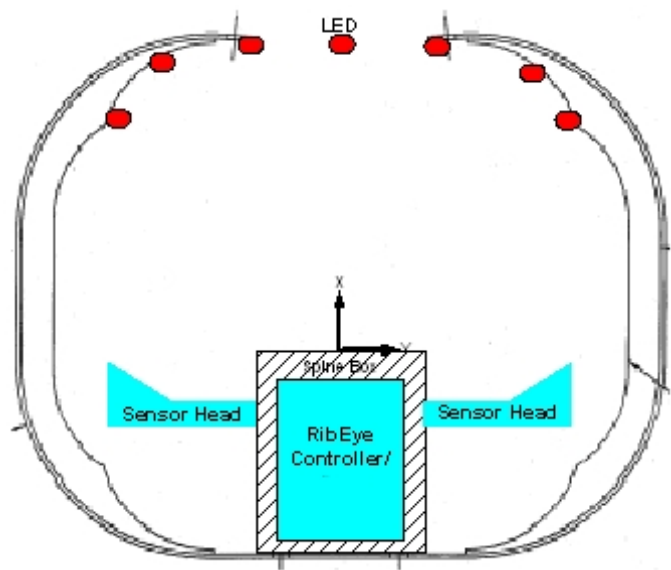
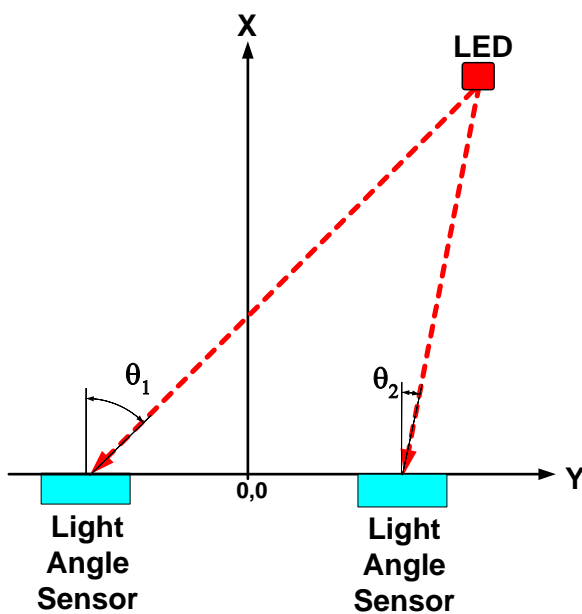


# RibEye™

## ATD Thorax Displacement Technology

### Basic Theory of RibEye™

- Two (2) light angle sensors spaced a known distance apart measure the angle of the infrared light source - Light Emitting Diodes (LEDs)
- From the two measurements of the LED, one from each angle sensor, the LED positions can be calculated using triangulation.



### RibEye™ Components

- Light emitting diodes (LEDs) (up to 12)
- Light angle sensors (mounted to the spine box) derive the position of the LEDs – depending on the application this would include 2 or 3 sensors
- Controller assembly mounted in the spine box
- Interface box (power, trigger, communications and arming) located externally
- Firmware
- User's Manual

Currently available for the Hybrid III 5th Percentile Female and the SID-II's

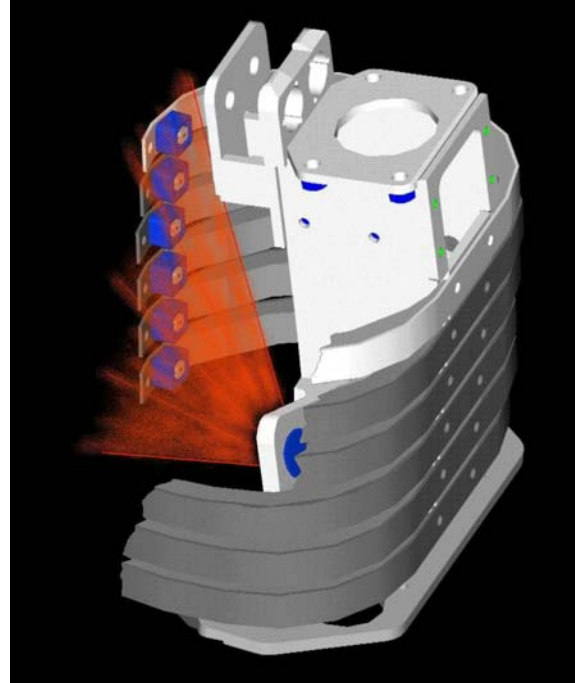
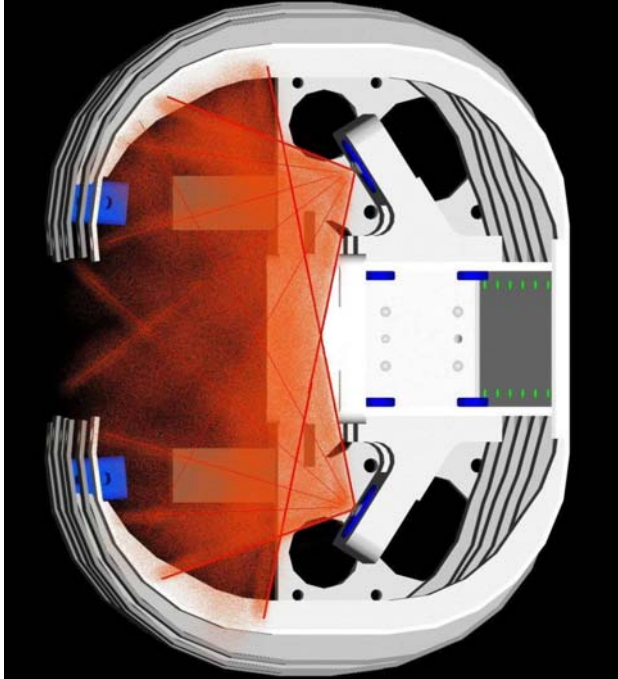
**PATENT PENDING**

Robert A. Denton, Inc. 2967 Waterview Drive, Rochester Hills, MI 48309 USA  
Tel (248) 852-5100 \* Fax (248) 852-6060 \* email: info@radenton.com \* www.radenton.com



# RibEye™

## ATD Thorax Displacement Technology



### Advantages of RibEye™ for Measuring ATD Thorax Displacement

- Multiple point measurement (up to 12 points @ 10kHz) – captures linear & oblique load conditions
- Multiple axis (2 or 3) – capable of measuring X, Y & Z-axis from each point
- Non-Contact – no mechanical linkages between spine box & ribs
- Accuracy = +/- 1mm (matches output from traditional displacement sensors)
- Easy to package in all types of ATDs (adult and child) & applications (frontal impact, side impact, etc)
- Simple installation for LEDs and light sensors
- Calibration of photo sensors with precision fixture
- Communication interface with existing DAS suppliers

Currently available for the Hybrid III 5th Percentile Female and the SID-II's

**PATENT PENDING**

Robert A. Denton, Inc. 2967 Waterview Drive, Rochester Hills, MI 48309 USA  
Tel (248) 852-5100 \* Fax (248) 852-6060 \* email: info@radenton.com \* www.radenton.com