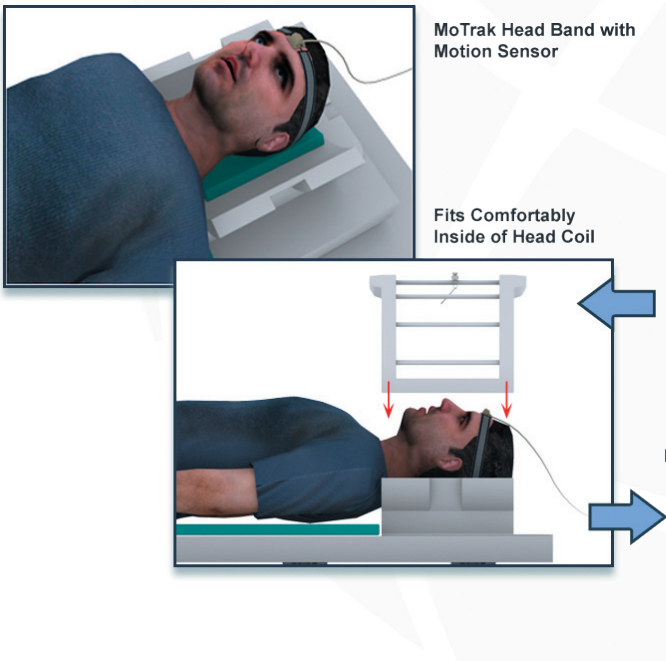
MoTrak®

Head Motion Tracking System

MRI studies require extended periods of scanning with minimal participant movement. A participant's movement during a scan can result in unusable data and lost funds. In a simulator, the participant can simultaneously be habituated to the MRI environment, while being trained to remain still via feedback from the MoTrak system. MoTrak software uses Ascension Technology's Flock of Birds.

motrak
Head Motion Tracking System

The sensor attaches to the participant's head to determine the position of the head in space relative to the transmitter. The sensor records angular rotations as well as positional displacements from an initially calibrated position. The goal is to monitor how much the participant moves while the scan is in progress. This information is displayed and logged by the program in real-time, allowing observation of head motion in an MRI simulator.



- Linear feedback of X,Y,Z movement and rotational feedback on X,Y,Z axis (Pitch, Roll, Yaw coordinates)
- User defined thresholds for motion detection
- Graphic output of participant motion
- Auditory feedback to the participant when the threshold of movement limit has been reached
- Visual feedback of head motion for the participant via a user display
- Movie playback for participant with head motion pause feature
- Real-time data logging and calibration

PSYCHOLOGY SOFTWARE TOOLS
Solutions for Research, Assessment, and Education

311 23rd Street Extension
Suite 200
Sharpsburg, PA 15215–2821
USA

Phone: 412.449.0078
Fax: 412.449.0079
E-mail: sales@pstnet.com
Web: www.pstnet.com