

Eye Tracking Solutions

for Applications in Man-Machine Interface Evaluation and Human Factors Research

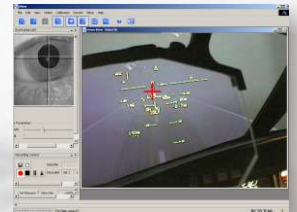


The Challenge

Today the ability to measure and analyze eye movements becomes even more important for on-task assessment of **man-machine interfaces** in vehicles such as **aircraft, car, train, ship** and other areas such as **air traffic control, power plant control, operating room**. Eye tracking solutions for **simulators** and **real environments** are needed.

This requires:

- Accurate and reliable measurements of eye movements and eyelid closure
- Seamless integration with simulators and CAVES, real vehicles and environments
- Fast setup and efficient operation for research and training purposes
- Compatibility with other psycho-physical sensors (e.g. ECG, EEG, GSR)



The Solution – SMI Eye Tracking

SMI provides cutting-edge eye tracking solutions for man-machine interface evaluation and human factors research. SMI eye tracking systems collect all relevant eye movement data and allow for fast and accurate control and analysis.

- Measurement of horizontal and vertical gaze position, pupil size, eyelid closure and blink
- On-line monitoring, recording, and real-time transmission of eye movement data
- Integrated digital video recording and video review functions for scene and operator video stream
- Workflow-oriented design for effective training progress and performance monitoring
- Assessment of operator status and attention monitoring
- Contact-free and head-mounted eye tracking interfaces available
- Data export to ASCII format for post-processing using statistical software (e.g. MATLAB®, SPSS®, Excel™)

SensoMotoric Instruments Inc.
 97 Chapel Street
 Needham/Boston, MA 02492
 USA
 Phone: +1-781-453-1377
 Fax: +1-781-453-1378
<http://www.smiusa.com>

SensoMotoric Instruments GmbH
 Warthestr. 21
 14513 Teltow/Berlin
 Germany
 Phone: +49-(0)3328-3955-10
 Fax: +49-(0)3328-3955-99
<http://www.smi.de>