Eye Tracking HMD Upgrade Package

for the Oculus Rift DK2

- New possibilities for gaze interaction, personalized vision calibration and fully immersive visual perception analysis

- SDK for real-time streaming of eye and gaze data

- Support for popular VR engines (Vizard, Unity)

- SMI Mobile Eye Tracking platform proven with 100,000+ participants

SMI Eye Tracking HMD Upgrade Package for the Oculus Rift DK 2

SensoMotoric Instruments (SMI) offers the world's first eye tracking upgrade package for the Oculus Rift DK2 virtual reality headset.

New possibilities for gaze interaction, personalized vision calibration and visual perception analysis

Adding SMI's leading mobile eye tracking technology provides new possibilities for scientists, VR developers and application providers.

SMI integrated eye tracking in the Oculus Rift DK 2 even works calibrationless allowing instant:

- Gaze triggered interaction
- Personalized calibration and 3D visualization
- Fully immersive visual perception analysis

SDK for real-time streaming of eye and gaze data

The SMI package comes with a C/C++ SDK. This makes all important eye and gaze data available in real-time, such as eye position and eye to screen distance.

Integration with popular VR engines

SMI supports integration into a broad range of VR-solutions, e.g. in the WorldViz Vizard VR engine - even with integrated motion tracking - or in Unity, another commonly used plat-form to create 3D content.

Upgrade for existing Oculus Rift DK2 customers

The SMI Eye Tracking Upgrade Package is available for already purchased Oculus Rift DK2. Due to Oculus license agreement, SMI only upgrades customer-owned Oculus Rift DK2 headsets. Please contact SMI for further details.

Learn more: www.smivision.com/eyetracking-hmd

Technical specifications

Eye Tracking	Tracking	60 Hz binocular
	Trackable field of view	Horizontal: 80° Vertical: 60°
	Accuracy	0.5-1°
	Calibration	Calibrationless 1- and 3-point Slip compensation
Head Gear	Connection	Eye Tracking is operated through DK2 USB port
	Dimensions head unit	Eye Tracking adds 80g to DK2 Interface weight
Operating Device	Operating system	Win 7 (32 / 64 bit) Win 8.1 (32 / 64 bit)
	System requirements	Intel I7 2GB RAM USB 2.0 or USB 3.0
Interfacing	Software Integration	Eye Tracking server interfaces with SDK VR engine PlugIns for: • Unity • Worldviz
	Hardware integration	Plug and Play HW integration, no additional wires, no HW adjustments prior to use
	Communication	SDK (C/C++): • Pupil position • Inter- Pupillary- Distance (IPD; Pupil to pupil distance) Inter- Ocular- Distance (IOD; Eye to Eye distance) • Eye ball center position • Eye to screen distance • Eye to lens distance • Point of regard on display (Left eye; Right eye; Binoc) • Binocular gaze vectors • Cyclops gaze vector • Pupil diameter (L;R) • 5Hz eye images

Contact information

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