Materials List for:

## **Creating Virtual-hand and Virtual-face Illusions to Investigate Self-representation**

Ke Ma<sup>1</sup>, Dominique P. Lippelt<sup>1</sup>, Bernhard Hommel<sup>1</sup>

<sup>1</sup>Cognitive Psychology Unit, Leiden University

Correspondence to: Bernhard Hommel at hommel@fsw.leidenuniv.nl

URL: https://www.jove.com/video/54784

DOI: doi:10.3791/54784

## **Materials**

Name	Company	Catalog Number	Comments
Vizard (Software controlling the virtual reality environment)	Worldviz		Vizard allows importing hand models and integrating the hand, dataglove and orientation tracker modules through self-written command scripts. These scripts can be run to control the presentation of the virtual hand in the virtual environment, the appearance of the hand and the way it moves; they also control vibrator activities.
Cybertouch (Dataglove)	CyberGlove Systems	Cybertouch	Participants wear this dataglove to control the movements of the virtual hand in the virtual environment. Measurement frequency = 100 Hz; Vibrator vibrational frequency = 0-125 Hz.
Intersense (Orientation tracker)	Thales	InertiaCube3	Participants wear the Intersense tracker to permit monitoring the orientation of their real hand (data that the used dataglove does not provide). Update rate = 180 Hz.
Biopac system (Physiological measurement device)	Biopac	MP100	The hardware to record skin conductance response.
Acquisition unit (Physiological measurement device)	Biopac	BN-PPGED	The hardware to record skin conductance response.
Remote transmitter (Physiological measurement device)	Biopac	BN-PPGED-T	Participants wear the remote transmitter on their left hand wrist; it sends signals to the Biopac acqusition unit.
Electrode (Physiological measurement device)	Biopac	EL507	Participants wear the electrode on their fingers; it picks up skin conductance signals.
AcqKnowledge (Software controlling acquisition of physiological data)	Biopac	ACK100W, ACK100M	The software to record skin conductance responses.
Вох	Custom-made		Participants put their right hand into the box
Computer	Any standard PC + Screen (could be replaced by VR glasses/devive)		Necessary to present the virtual reality environment, including the virtual hand.
Cape	Custom-made		Participants wear this cape on their right shoulder so they cannot see their right hand and arm.

Kinect (Head position tracker)	Microsoft		Kinect tracks the X-Y position of the participant's head. Recording frame rate = 30 Hz.
FAAST (Head position tracker software)	MXR	FAAST 1.0	Software controls Kinect and is used to track the position of the participant's head.
Intersense (Head orientation tracker)	Thales	InertiaCube3	Intersense tracks rotational orientation changes of the participant's head. Update rate = 180 Hz.
Facegen (Face-model generator software)	Singular Inversions	FaceGen Modeller	Facegen allows creating various virtual faces by varying various parameters, such as male/femaleness or skin color.
Сар	Any cap, e.g., baseball cap		The cap carries the Intersense orientation tracker.
Computer	Any standard PC + Screen		Necessary to present the virtual reality environment, including the virtual head.