Science **made** smarter

# PhysioVR Software Module Descriptions

## Overall Indications for Use: Vestibular / Balance, Neurology and Musculoskeletal Rehabilitation

### Assessment

| Module | Indications for Use | | | Description |
|---|---|---|---|---|
| | Vestibular / Balance | Neurology | Musculo-skeletal | |
| Cervical Joint Position Error Test | X | X | X | Assessment of cervical muscle proprioception. |
| Cervical Range of Motion | X | X | X | Assessment of joint amplitudes, in degrees, and pain threshold markings in the cervical spine. |
| Dynamic SVV | X | X | | Assessment of verticality perception without influence of the visual field with a moving background. |
| HemiNeglect | | X | | Assessment of neglect through measuring head angles through VR headset. |
| hCTSIB | X | X | | Assessment of an individual's ability to maintain balance under varying sensory conditions. |
| Rod and Frame Test | X | X | | Assessment of verticality perception without influence of the visual field. |
| RotationVR-Assessment | X | | | Assessment of vestibular function. Requires use of a rotary chair. |
| RotationVR-Assessment RCIT | X | | | Assessment of vestibular function by impulse movements. Requires use of a rotary chair. |
| SVV | X | X | | Assessment of verticality perception without influence of the visual field. |
| Upper Extremity ROM | | X | X | Assessment of shoulder joint amplitudes in degrees. |

### Assessment and Training

| Module | Indications for Use | | | Description |
|---|---|---|---|---|
| | Vestibular / Balance | Neurology | Musculo-skeletal | |
| BellsTestVR | | X | | Assessment and rehabilitation of unilateral spatial neglect in a VR adapted version of the Bell's Test. |
| DVA VR | X | X | | Assessment and rehabilitation of image stabilization during high-frequency head movements. |
| Memorization | | X | | Assessment and rehabilitation of memory with a simulated grocery list activity. |
| Spatial Navigation | | X | | Assessment and rehabilitation of cognition through navigation of simulated grocery store environment. |
| StroopVR | | X | | Assessment and rehabilitation of neuro-cognitive deficits through a VR adapted Stroop Test. |

SVV: Subjective Visual Vertical, hCTSIB: Head Clinical Test of Sensory Interaction on Balance, RCIT: Rotary Chair Impulse Test, DVA: Dynamic Visual Acuity

VIRTUALIS

Rehabilitate balance disorders with the Virtualis solutions, which are a part of the Interacoustics balance portfolio.

Interacoustics

Audiometry Tympanometry ABR OAE Hearing Aid Fitting **Balance**

Interacoustics A/S Audiometer Allé 1 5500 Middelfart Denmark Tel: +45 6371 3555 info@interacoustics.com interacoustics.com

## Training

| Module | Indications for Use | | | Description |
|---|---|---|---|---|
| | Vestibular / Balance | Neurology | Musculo-skeletal | |
| AirRaceVR | X | X | X | Rehabilitation of the cervical and thoracolumbar spine through simulated airplane obstacle course activity. |
| BowVR | X | X | X | Rehabilitation of muscular strengthening of the upper limbs, mobilization of the spine and overall balance through simulated archery activity. |
| Car Simulation | X | | | Habituation of motion sickness in a simulated car environment. |
| Catch the Ball | X | X | X | Rehabilitation of balance, upper and lower limb motor function through simulated sport practice activity. |
| CrowdVR | X | | | Habituation of symptoms through a simulated crowd environment. |
| Electrical Track | | X | X | Rehabilitation of upper limbs by moving through a simulated electrical track environment. |
| EscalatorVR | X | X | | Habituation of symptoms through a simulated escalator environment. |
| GeoboardVR | | X | | Rehabilitation of visuospatial deficits through a virtual geoboard environment. |
| Head-eye Coordination | X | X | X | Rehabilitation of the cervical spine, balance and dizziness symptoms by following a target along a trajectory. |
| Lift | X | | | Habituation of symptoms related to the fear of heights through simulated lift/ elevator environment. |
| MatchingVR | X | X | X | Rehabilitation of balance, upper limb and cognitive function with a dual task in a simulated card matching activity. |
| Mirror | | X | | Rehabilitation of upper limbs in a virtual reality simulated mirror therapy activity. |
| Mirror & Ball | | X | | Rehabilitation of upper limbs in a virtual reality simulated mirror therapy activity with small therapy balls. |
| Mirror & Objects | | X | | Rehabilitation of upper limbs in a virtual reality simulated mirror therapy activity with use of various objects to manipulate. |
| Mirror Lower Extremity | | X | | Rehabilitation of lower limbs in a virtual reality simulated mirror therapy activity. |
| Motorway Simulation | X | | | Habituation of symptoms caused by motorist syndromes in a simulated driving environment. Used with or without the thrustmaster steering wheel. |
| Optical Flow | X | X | | Habituation of symptoms and balance rehabilitation through visually conflicting environment including various tunnels and obstacles. Option to pair with the dynamic force plate. |
| Optokinetic | X | X | | Rehabilitation of symptoms and balance in various optokinetic stimulations. |
| Pursuit Upper Extremity | | X | X | Rehabilitation of upper limbs in a simulated space environment. |
| Reading (Sway Referenced) | X | | | Habituation of symptoms in a simulated car environment while reading a book. |
| RelaxationVR | X | X | X | Habituation of symptoms in simulated low stimulation environments. |
| ReflexVR | X | X | X | Rehabilitation of the spine, upper limb, lower limb and balance in a simulated balloon popping environment. |
| RotationVR-Rehabilitation | X | | | Rehabilitation of vestibular function. Requires use of a rotary chair. |
| Sea Simulation | X | X | | Habituation of motion sickness in a simulated sea environment with various boat positions. Option to pair with the dynamic force plate |
| SequenceVR | | X | | Rehabilitation of cognition in a simulated piano environment. |
| Shoulder Rotation | | X | X | Rehabilitation of the upper limbs through a simulated cannon shooting activity. |
| ShoulderVR | | X | X | Active functional shoulder rehabilitation in environment with avatars. |
| Spine Rotation | X | X | X | Rehabilitation of balance, upper limbs and spine through a simulated painting activity. |
| SpineVR | | X | X | Rehabilitation of the lower limbs and spine through a simulated underwater shrimp catching activity. |
| SquatVR | | X | X | Rehabilitation of lower limbs and spine through a simulated star catching activity. |
| Supermarket | X | X | X | Rehabilitation of cognition, upper limb function and dizziness symptoms in a simulated grocery store environment. |
| Target Tracking | X | X | X | Rehabilitation of the cervical spine, balance and dizziness symptoms in a simulated bug catching activity. |
| Waves (Sway References) | X | X | | Habituation of motion sickness in a simulated sea environment. |
| Whack-a-Mush | | X | X | Rehabilitation of upper and lower limbs and trunk, attention, inhibition functions and hemineglect in a simulated whack-a-mush activity. |

VIRTUALIS

Rehabilitate balance disorders with the Virtualis solutions, which are a part of the Interacoustics balance portfolio.

Interacoustics



Interacoustics A/S Audiometer Allé 1 5500 Middelfart Denmark Tel: +45 6371 3555 info@interacoustics.com interacoustics.com