



REF **ELECTRICAL TRACK**

CE Class I Medical Device

User manual

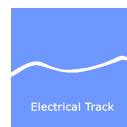
Distribution mode

Available for direct download at
<http://virtualisvr.com/espace-client/>

Use under licence



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DESCRIPTION

ELECTRICAL TRACK software is an immersive 3D simulation based on virtual reality technology, i.e. it allows a person to be immersed in an artificial digitally created world. **Electrical track** is a software handling upper limbs (orthopedics, rheumatology), neuro-cognitive disorders in adults (hemiplegia, hemineglect, CBT), progressive neurology (Parkinson's disease, MS, etc.).

INDICATIONS

Rehabilitation of an upper limb, of neurological disorders: hemiplegia, hemineglect, ataxias...

CONTRAINDICATIONS

Epileptic patients, children under 15 years of age, pregnant women.

FOR USE BY

Healthcare professionals: Physiotherapists; Occupational Therapists; Neuropsychologists; Neurologists; PRM (Physical and Rehabilitation Medicine) Doctors, etc.

Research Centers: CNRS, CHU, INSERM, etc.

WARNINGS AND CAUTIONS

During sessions, stay close to the patient in order to anticipate any loss of balance or discomfort caused by the use of virtual reality.

Define a working area of about 3m² to allow for risk-free movements.

Take a 10 to 15 minute break every 30 minutes of use.

Potential adverse effects are those due to software, i.e. vomiting, malaise, dizziness, syncope

The accessories required to use the software may emit radio waves that can interfere with the operation of nearby electronic devices. If you have a pacemaker or other implanted medical device, do not use the product until you have taken advice from your doctor or the manufacturer of your medical device.



Any serious incident should be notified in writing to qualite@virtualisvr.com

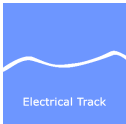
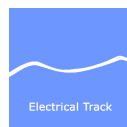


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1. GENERAL

1.1. Advice for use

This type of re-education must be undertaken progressively, especially in Virtual Reality where the stimulation is much more "powerful" than the traditional optokinetic stimulators.

These stimulations have the potential to cause certain disorders: Vasovagal syncope, epileptic seizures, migraines, etc. (Despite a test phase on more than 2000 patients. Similarly to previous generation optokinetics, caution is required)

The contraindications are identical: Mainly epilepsy and migraines.

As postural reactions can be spectacular, it is VERY STRONGLY advised to place patients in a safe environment and to stay close to them throughout the session.

It is also recommended to increase the duration and intensity of the stimulation very gradually, after an initial short session to make sure of patients' tolerance to this type of stimulation.

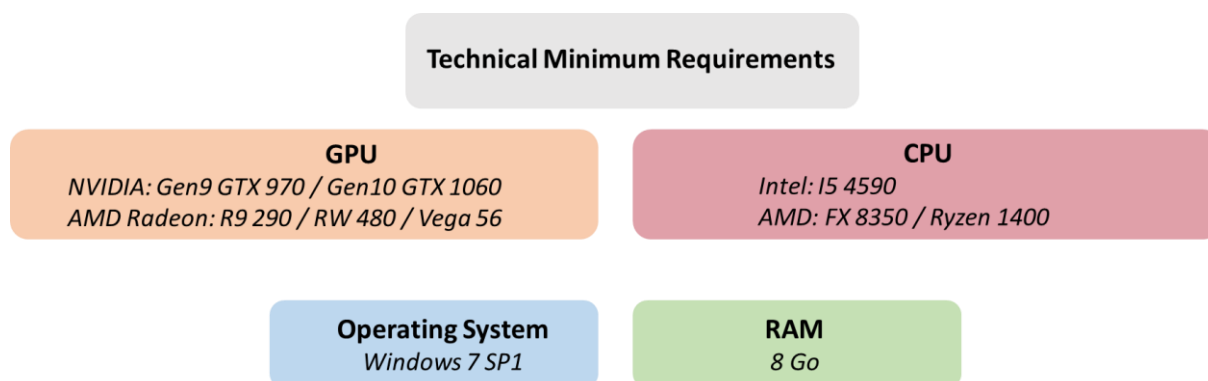
Virtualis declines any liability for any disorders suffered by patients during or after use of its software.

1.2. Hardware and minimum configuration requirements

Hardware required to use the system:

- VR Ready PC
- VR System: HTC VIVE, HTC VIVE Pro or compatible system
- Lighthouse bases (HTC VIVE tracking)
- HTC VIVE Controller
- XBOX 360 Controllers
- USB HUB

In order to install and use our virtual reality applications, we recommend a configuration equal to or higher than the system requirements:

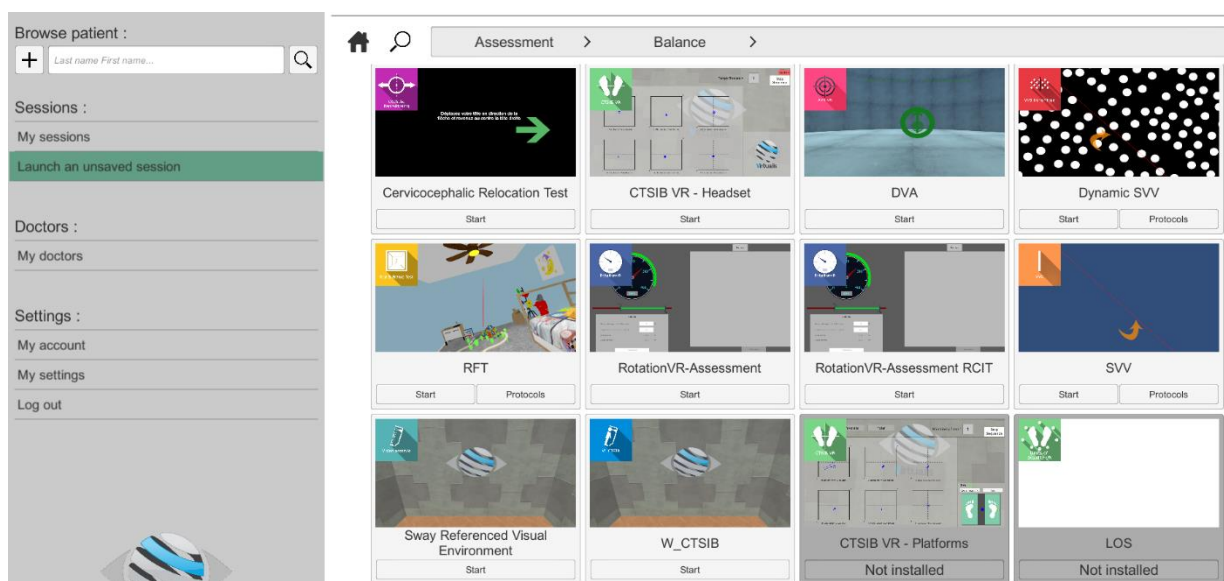


2. USE OF PATIENT MANAGEMENT

Once connected to the Patient Management software, you arrive on the home page. It is from this home page that you will be able to start your VR software as well as the other Patient Management functions.

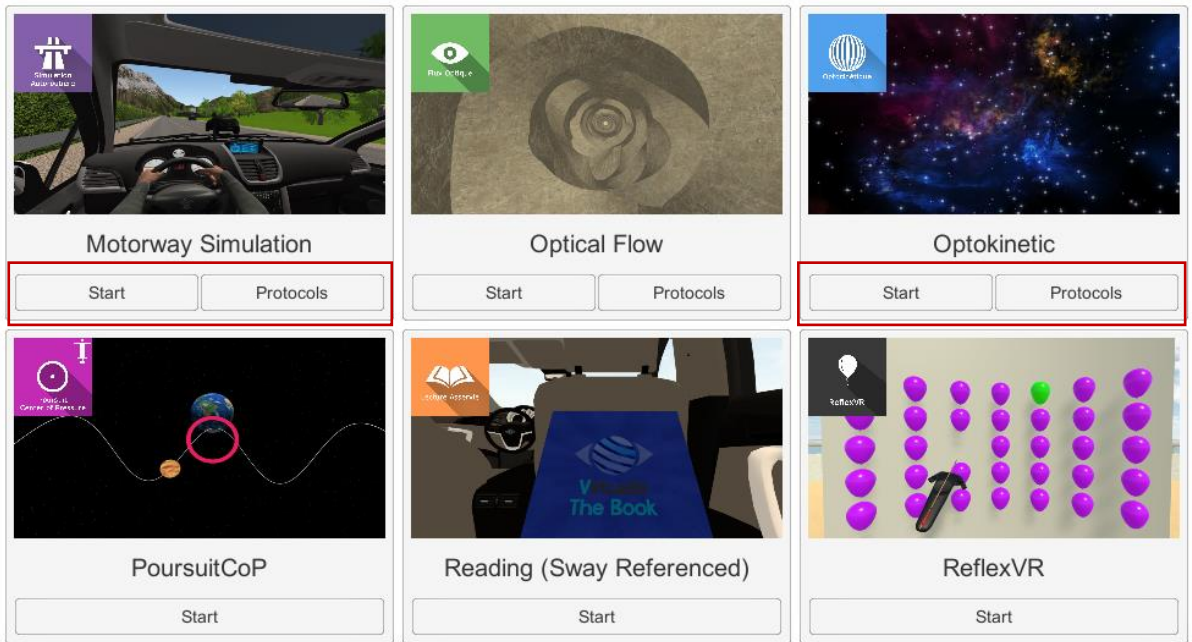
The software can be grouped according to criteria such as "Assessment" or "Re-education" and then by pathology type: Neurology, Balance, Functional or Kinetosis.

You can start or switch from one software to another from the home page by clicking the corresponding "Start" or "Protocols" button.

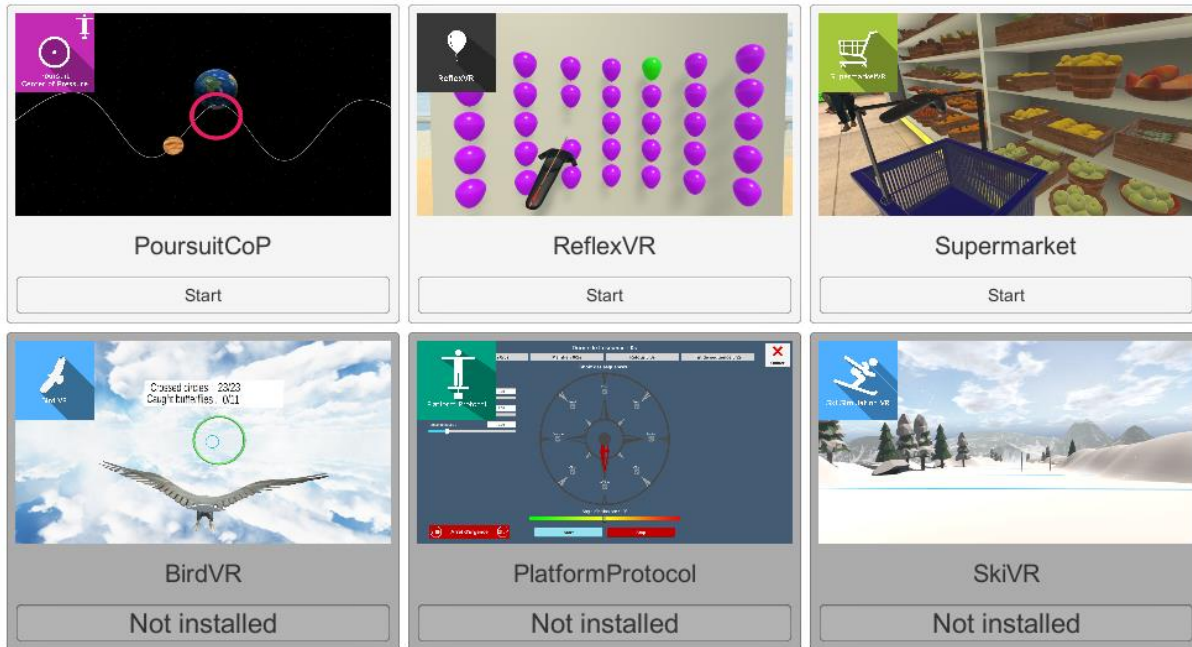


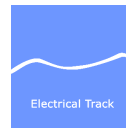
Some software can be started either in **manual mode**, by directly clicking the "Start" button, or in **protocol mode** by clicking the "Protocols" button.

The **manual mode** allows users to choose the settings for each environment. The **protocol mode** offers several sessions with different difficulty levels to test and gradually accustom patients to the VR environment.



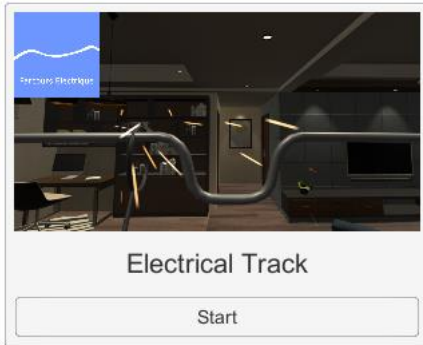
Software that is not part of your subscription package is greyed out. If you want to use it, please contact our sales department.





3. ELECTRICAL TRACK

3.1. Start interface

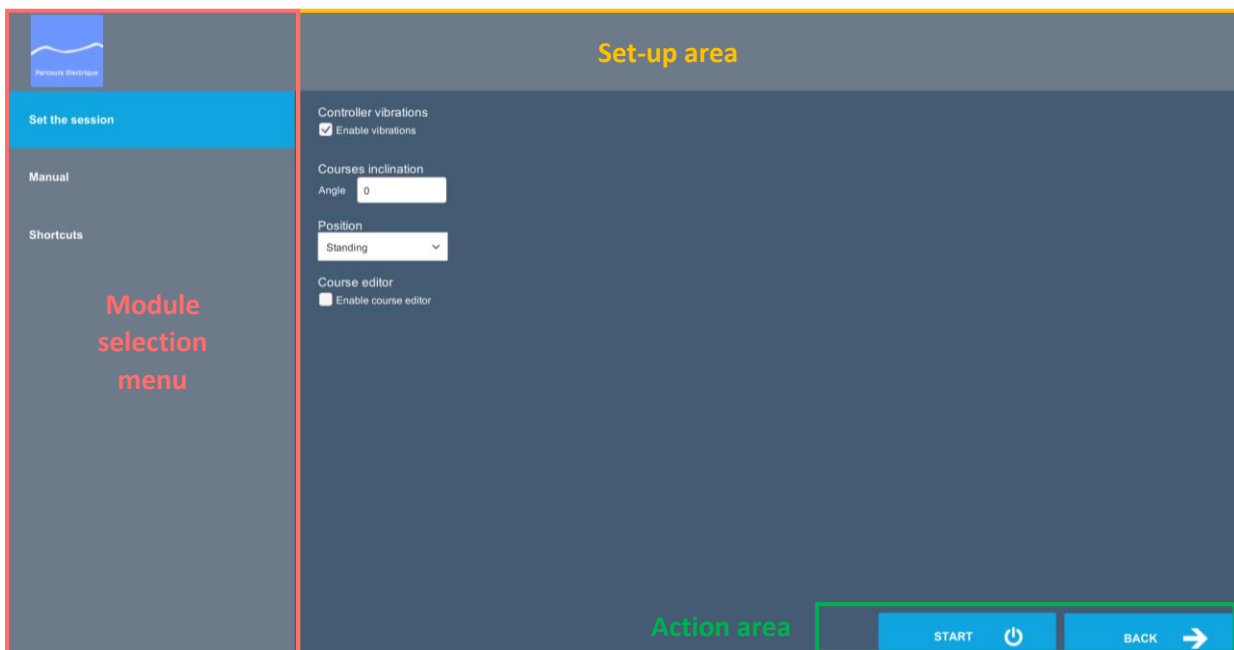


When starting the software in **manual mode** from Patient Management ("Start" button), the software is opened in a start interface consisting of a module selection menu on the left, a set up area on the right, and an action area at the bottom right.

Depending on the module selected in the left menu, the set up area shows the various possible settings/information.

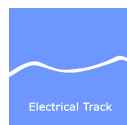
The general Patient Management menu can be accessed from the start interface by simply clicking the "Back" button located in the action area, or by pressing the "escape" key on the keyboard.

The module is launched by simply clicking the "Start" button in the action area.



Once this button is pressed, the module starts by taking into account the specified settings. You also have the possibility to modify some settings when the module has been launched, using the mouse.

The Start/Quit buttons allow the environment to be played back or stopped entirely to adapt the experience to the patient's sensations.



3.2. Module field of application

Adaptation of the famous game in a VR version! Follow a track with a ring without touching it in direct or mirror mode to stimulate patients' injured sides. Adjustable difficulty and haptic feedback.

3.3. Installing the patient

Use in a standing or sitting position, recenter at the start of the session.

3.4. Session settings

The variable settings for this module are as follows:

Controller vibration

A screenshot of a settings panel with a dark blue background. It contains the text "Controller vibrations" and a checked checkbox labeled "Enable vibrations".

Controller vibrations
 Enable vibrations

Controller vibrations may disturb some patients, they can be deactivated by unchecking the corresponding box.

Courses inclination

A screenshot of a settings panel with a dark blue background. It contains the text "Courses inclination" and a text input field labeled "Angle" with the value "0".

Courses inclination
Angle

The course inclination can be adjusted by entering an angle in the corresponding text field.

Choice of patient position

A screenshot of a settings panel with a dark blue background. It contains the text "Position" and a dropdown menu showing "Standing".

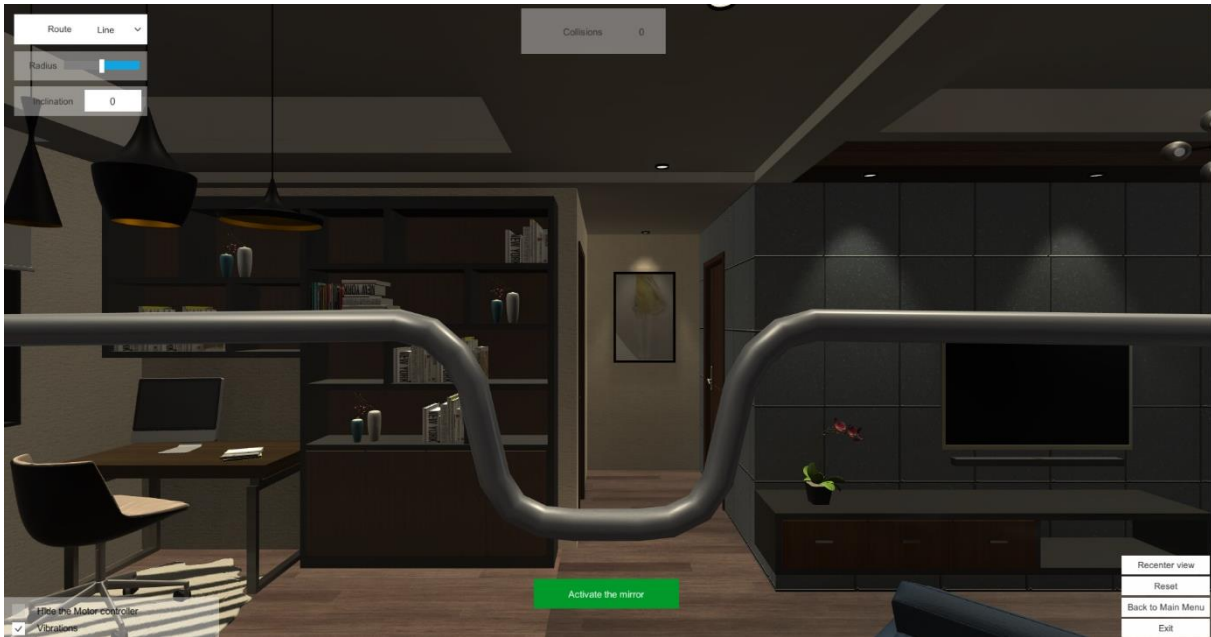
Position

The starting position can be either "standing" or "sitting" on a chair at a table.

Course editor

The course editor can be activated by checking the corresponding box. Several settings are then available: route accuracy, route thickness; 2D projection, mirror activation and inversion. It is also possible to save a route or load a route file to start the exercise.

Several settings are available during simulation:



Course model

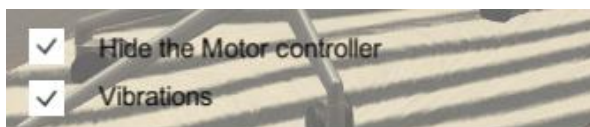
Proposes different course models

Radius

Controller ring radius, used to enlarge or reduce the ring

Tilt

Course orientation adjustment by entering a value



Hide the motor controller

Used to hide the main controller view in mirror mode

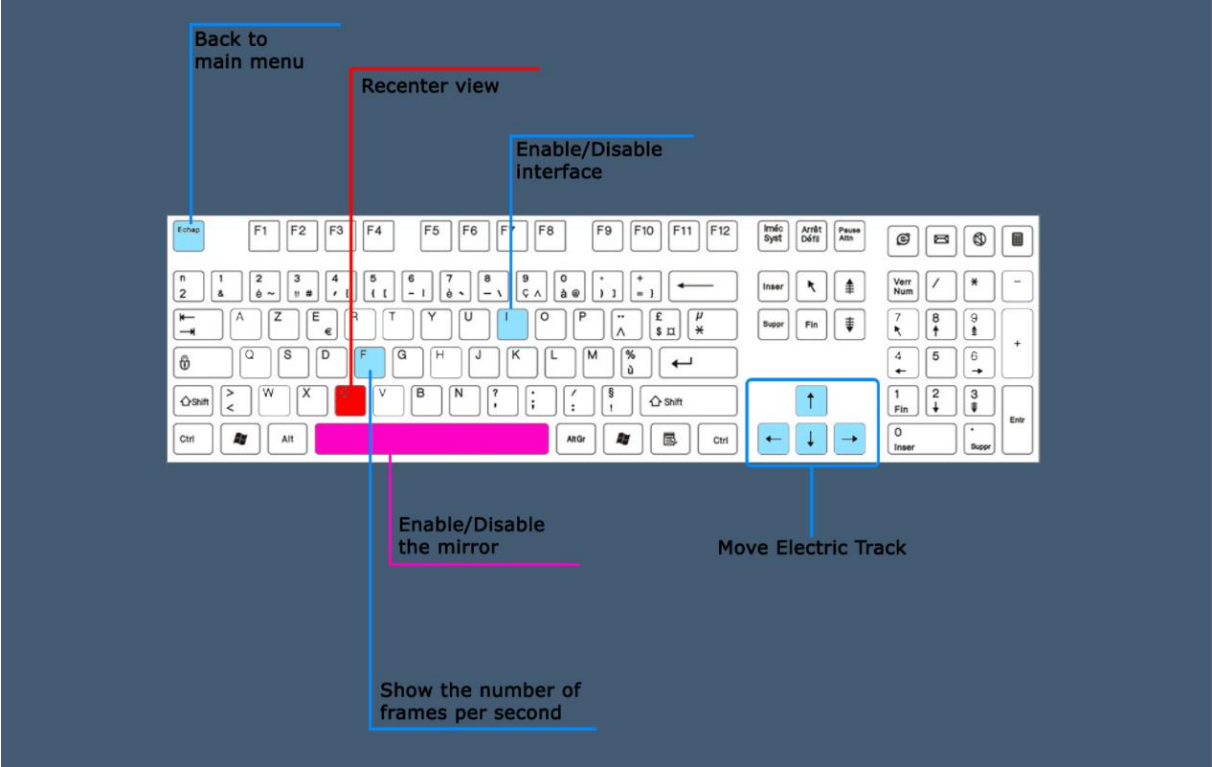
Vibrations

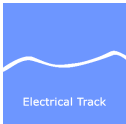
Activates or deactivates controller vibration

3.5. Shortcuts

Keyboard and joystick shortcuts are accessible:

- on the "Shortcuts" tab available at the start interface level





3.6. Data processing

Data retrieval and analysis uses the Patient Management software.