REF **Lift**

CE Class I Medical Device

User manual

Distribution mode

Available for direct download at
http://virtualisvr.com/espace-client/
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Table of contents

1. GENERAL

1.1. Description

LIFT is an immersive 3D simulation software based on virtual reality technology, meaning a person can be immersed in a digitally created artificial world. This is a realistic elevator (with glass walls) simulation software used to actively desensitize patients to their fear of heights.

1.2. Indications

Fear of heights (Acrophobia).

1.3. Module field of application

Gradually desensitizes patients to the fear of heights by adjusting the transparency of the glass walls, the elevator's height, its speed of ascent and descent, and the possibility for the patient to move forward on a board when the elevator is high above the ground.

1.4. Intended user

Healthcare professionals: physiotherapists; occupational therapists; neuropsychologists; ENT doctors; neurologists; PMR doctors (physical medicine and rehabilitation), etc.

Research Centers: CNRS, CHU, INSERM, etc.

1.5. Warnings and caution

Immersion in Virtual Reality is a powerful tool, especially for stimuli that can induce sensory conflicts.

WARNING

These stimulations can potentially cause certain disorders: vagal discomfort, epileptic seizures, migraines, vomiting, malaise, dizziness, syncope etc.

This type of re-education must be approached progressively, particularly in Virtual Reality where the stimulation is "powerful".

The contraindications are identical: mainly epilepsy and migraines.

RECOMMENDATION

As postural reactions can be spectacular, we STRONGLY recommend that you place the patient in a secure environment and stay close to him/her throughout the session to anticipate any loss of balance or discomfort caused by the use of virtual reality.

RECOMMENDATION

It is also recommended to increase the duration and intensity of stimulation very gradually after an initial short session to ensure the patient's tolerance to this type of type of stimulation

Motion sickness is treated by "habituation", so you need to recreate the symptoms experienced during transport.

WARNING

It is essential to stop the session when the first symptoms appear, generally "sweating".

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.

It would be counterproductive to take into account the fact that some motivated patients may wish to go further. It's up to the professional to "dose" immersion so as not to provoke neurovegetative symptoms. This type of symptom can intensify in the hour following the session.

Nor can Virtualis be held responsible for any disturbances suffered by patients during or use of their software.

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.

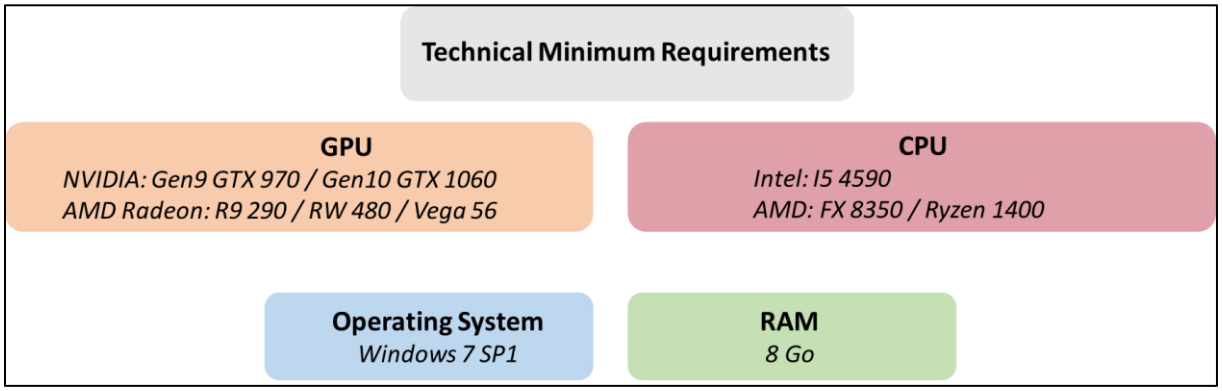
Any serious incident should be notified in writing to qualite@virtualisvr.com

1.6. 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)

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



1.7. Required accessories

VR headset, controller is optional.

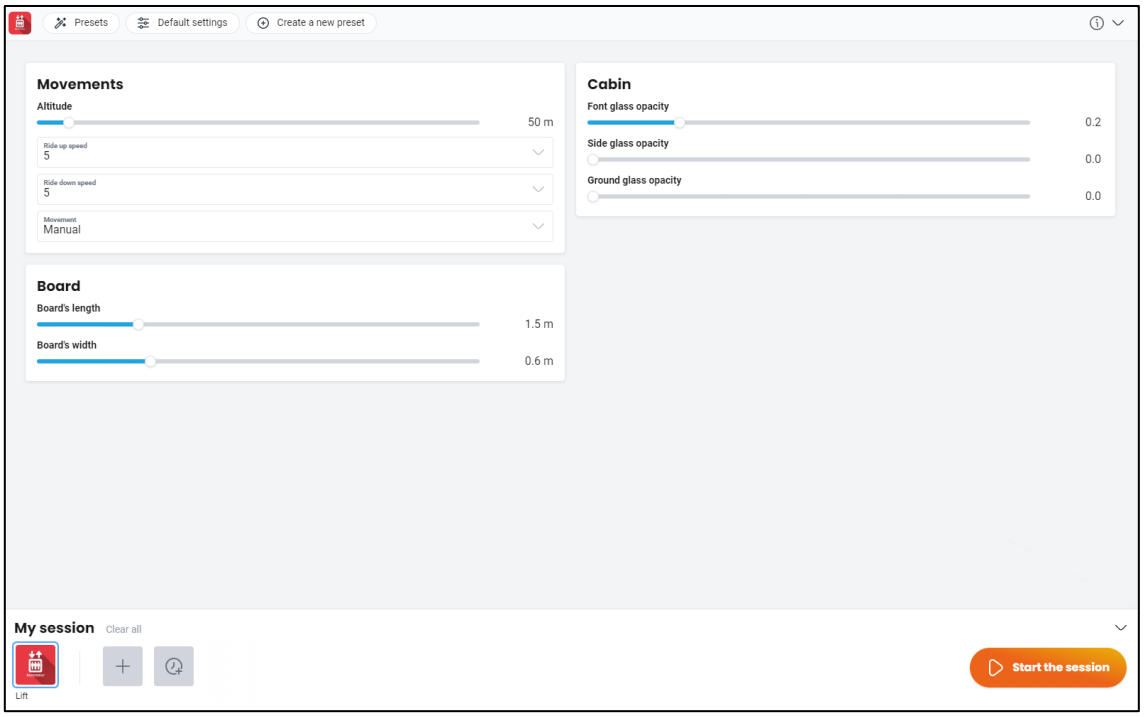
2. SOFTWARE USE

2.1. Patient setup

Use in the standing position.

When the patient is set up, have them look forward and center the environment in the headset by pressing "**C**" on the keyboard.

2.2. Session settings



The variable settings for this module are as follows:

2.2.1. Movements

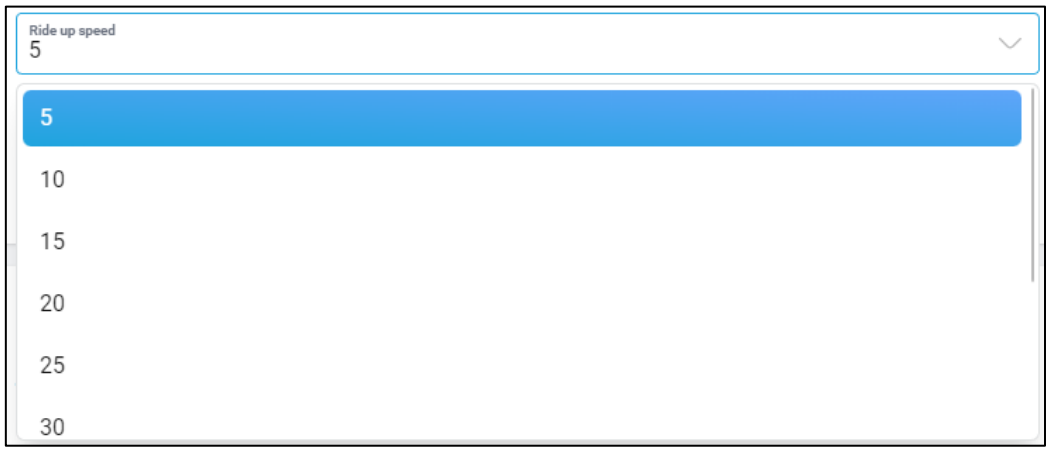
Altitude:

The altitude to be reached by the lift is entirely configurable with the cursor.

Value: 25 to 438m.

Can be set from 0 to 25 m using the shortcuts (see section 2.4)

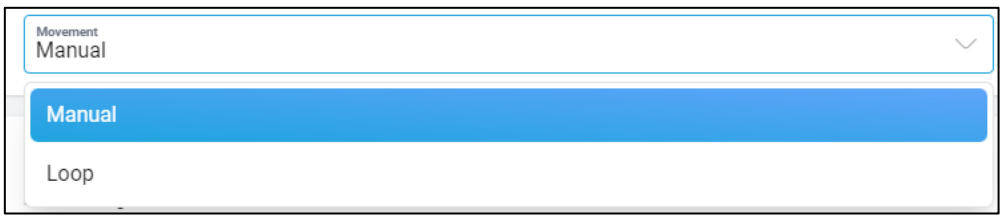
Ride up / down speed:



The lift ascent /descent speed is selected directly from the drop-down menu.

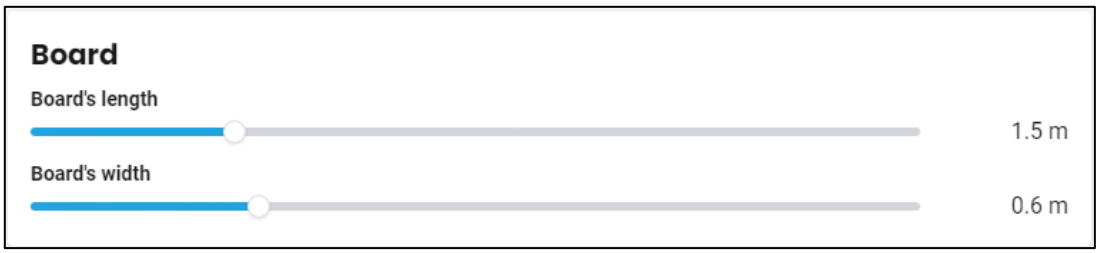
Value: 5 to 50.

Movement:



Possibility of choosing a manual or loop animation. In loop mode, the lift automatically moves up and down.

2.2.2. Board



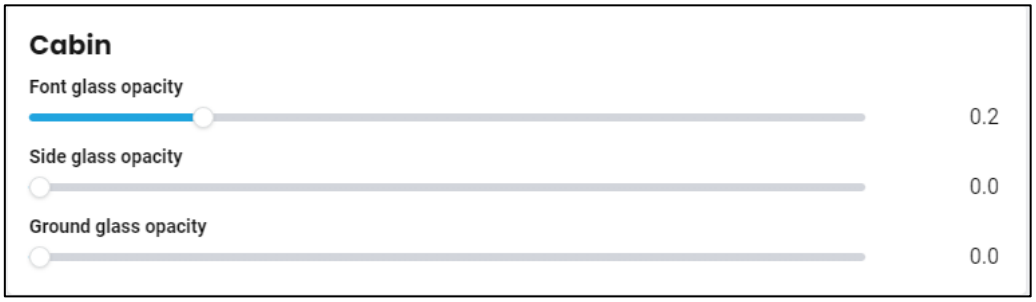
Board length and width:

Possibility of adjusting the board size before the session and in real time during the session.

Value:

- **Length**: 0.5 to 5.0m.
- **Width**: 0.3 to 1.5m.

2.2.3. Cabin



Opacity:

The opacity of the **front**, **side** and **ground glass** can be adjusted using the sliders.

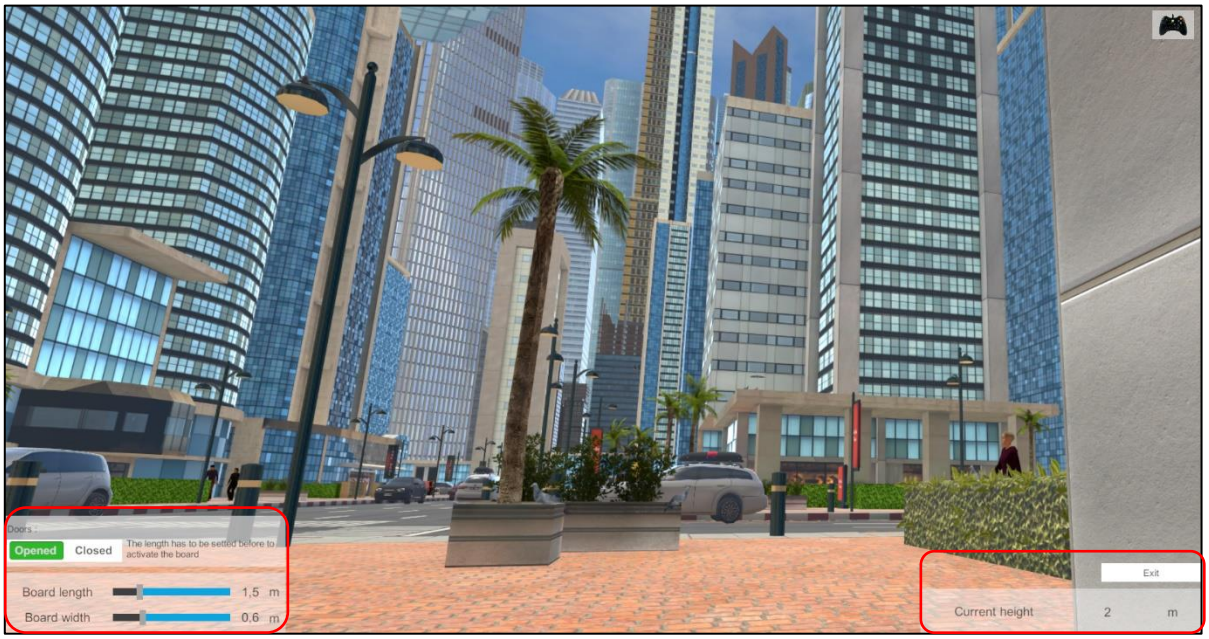
Value: 0.0 to 1.0.

2.3. Session

Once the presets have been selected, click on the "**Start the session**" button in the bottom right corner of the screen.

WARNING

During the descent movement, abdominal sensations (normally due to visceral graviceptors) are common. Some patients may be surprised by this descent. It is important to remain vigilant of their reaction.



At the **bottom left of the screen** are the session parameters:

- **Doors:**

The elevator door is open by default. It can be controlled in real time using the "Open/Close" buttons.

- **Board length and width:**

Board size can be set in real time.

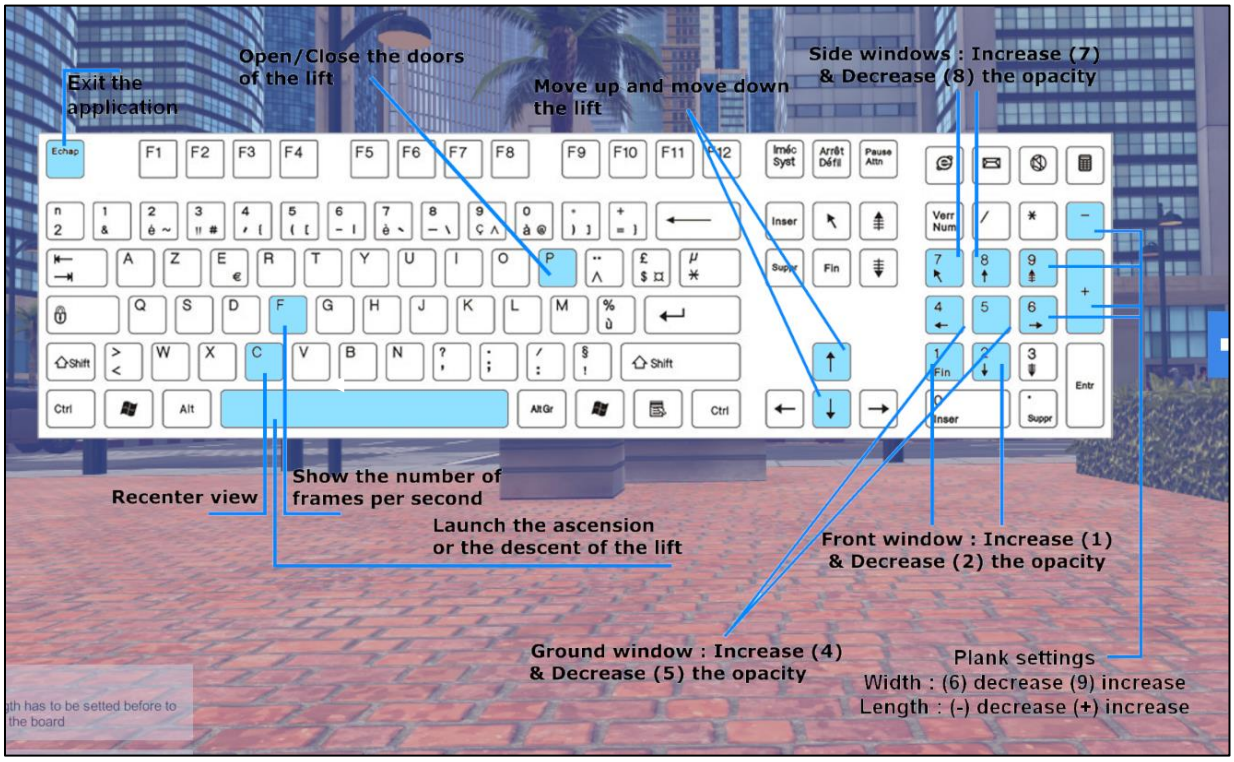
- At the **bottom right of the screen**:

View the elevator's **altitude** in real time.

The "**Quit**" button is used to end the session.

2.4. Shortcuts

During the session, the shortcut list is found by clicking on the Xbox controller icon at the upper right corner of the screen.



2.5. Results

No results are displayed at the end of the session.

2.6. Data processing

Data retrieval and analysis uses the Patient Management software (see dedicated user manual).