Introduction

Virtual Life Support™ is a Virtual Reality training module that prepares people to provide **CPR assistance** in the real world. Existing CPR courses let you train your technique, but no amount of classroom training can truly prepare you for encountering someone unconscious on the ground. With virtual reality we can close the gap between classroom training and the real world unlike any other tool, giving people the confidence to act when there is a life on the line.

With Virtual Life Support (VLS) VR Lab offers a complete, innovative and fun virtual reality application for learning to resuscitate according to the guidelines of the **European Resuscitation Council (ERC)** and the **Dutch Resuscitation Council (NRR, Nederlandse Reanimatie Raad)**. The target groups for VLS are very diverse: from organizations that want to introduce their employees to resuscitation and the use of an AED in an innovative way, to professional training courses, such as first aid training, training for first responders and training in health care.

> For questions regarding setup and use of Virtual Life Support, please follow the instructions on this page. Still having problems? Check out the Frequently Asked Questions or use the support form on this website.
>
> Please take a look at our instruction videos on YouTube for a quick introduction to various tasks related to using Virtual Life Support, including a quick-start guide.

Prerequisites

Virtual Life Support has been developed for the Meta Quest 2 and is compatible with Meta Quest 3 and Meta Quest Pro. As of version 1.5.2 it is also available for the Pico 4 Enterprise.

VLS requires hand tracking to be enabled. It does not support controllers. Hand tracking must be enabled on the headset.

On the Meta Quest, go to the *Settings* application, select *Device* on the left side and then *Hand and controllers*. You can now enable hand tracking. More information can be found here.

On the Pico 4 Enterprise, go to the Settings application, select LAB on the left side and then Hand Tracking.

As you need to be able to kneel down with the victim you need to set up a room scale playspace and guardian. More information for Meta Quest can be found here . We strongly recommend to setup the play space manually and not to rely on the automatic play area detection that some headsets may offer. In particular it is very important to set the floor level accurately.

VLS measures your CPR performance. For the best results we recommend using a manikin with a chest height of at least 21 cm (the chest height of a Laerdal Little Anne). Using a different manikin is possible as the chest height can be adjusted in the setup.

It is also possible to use some other object that you can compress, such as a firm cushion. The object should ideally have a height of at least 21 cm and compressing the object should require some force (as is the case with a human body). Accurate CPR measurements are only possible with a proper manikin (half or full body). Make sure the manikin or alternative object does not shift during the training.

Starting with version 1.4 it is also possible to increase the accuracy of measuring the CPR performance by connecting VLS to a SimCPR® Pro Trainer. This simple device, worn on the wrist, connects via Bluetooth with VLS and sends it sensor data directly to VLS.

Features

Virtual Life Support:

- Has been developed according to the guidelines of the European Resuscitation Council.
- Is skills training. Not only **knowing** the right thing to do is important, but also being able to **perform** them.
- Is intuitive to use: use your **hands** instead of controllers.
- Includes a fully implemented virtual ZOLL AED 3® with real time feedback about your CPR performance.
- Is a standard software solution: supported, maintained with regular updates and new releases.
- Uses standalone Virtual Reality hardware, which does not require a connected PC.

Installation

VLS is distributed via various channels and installation depends on the channel. The following channels are currently supported:

- ArborXR
- ManageXR
- Meta store release channels on an invite-only basis

More channels will be made available in the near future. Note that sideloading will not be supported.

You should received an email with further information regarding the installation.

Note that by installing Virtual Life Support you accept the Virtual Life Support License Agreement that will have been provided to you.

Setup

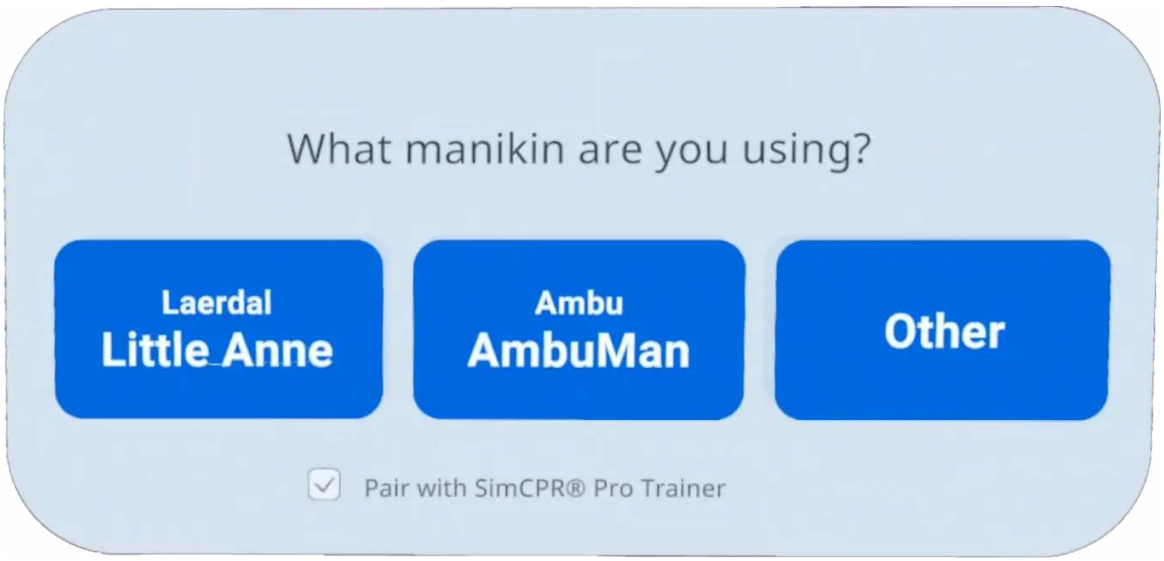
Once you launch Virtual Life Support you will be in the setup environment where you first need to:

- Select the language (**English** or **Dutch**)
- Select the training mode (currently only one training mode is available: **Unassisted**)
- Check fitting and sound of your headset

Buttons can be pressed with a stretched index finger.

Select manikin

The next step it to select either a predefined manikin, currently presets for the Laerdal Little Anne and AmbuMan are provided, or to select Other. Use Other for manikins for which no preset is provided or for a manikin alternative, such as a firm cushion.



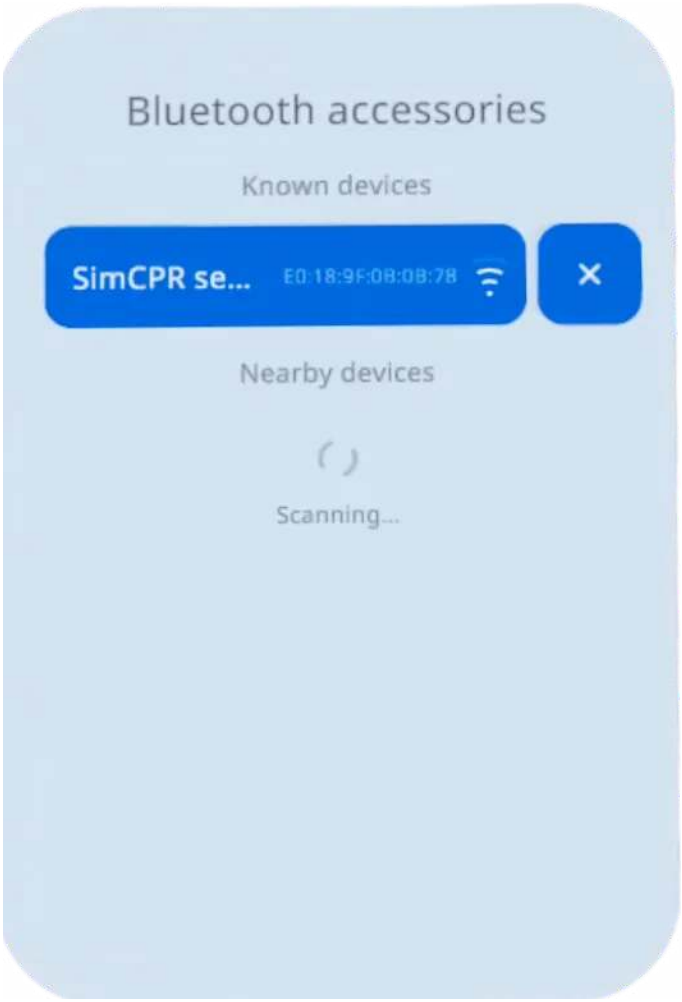
When you select Other you will have to specify the height of the manikin or alternative object. Please specify the accurate height of the “thorax” (where you will push to apply the compressions). You can check whether the height is correct by aligning the manikin and putting your flat hand on the right spot. When the height is too high, your ghost hand will disappear in the outline of the manikin. When it is too low, your hand will appear to float above the manikin outline.

Setting up the SimCPR® Pro Trainer

If you want to use a SimCPR® Pro Trainer for more accurate measurement of CPR performance you can set this up with these steps:

1. Turn on your SimCPR® Pro Trainer.
2. Select *Pair with SimCPR® Pro Trainer* on the manikin selection dialog.
3. The software will then scan for Bluetooth accessories, showing only the SimCPR devices that it will find. Select the device and continue.
4. The software remembers the device and will show it under *Known devices*, the next time you run the training. Select and continue.

It is recommended to keep a specific SimCPR® Pro Trainer together with a specific headset, so it easily connects the next times.



Align manikin

The most important part of the setup is the careful alignment of the victim outline with the manikin. This will take some getting used to. Use a combination of adjusting the position of the virtual victim as well as moving around the real world manikin.

Once you're ready, select **Confirm** and you can start the training.

Use

Once you have started the training you will see a victim on the ground, unresponsive. You need to follow the guidelines from here on. These guidelines can be found here.

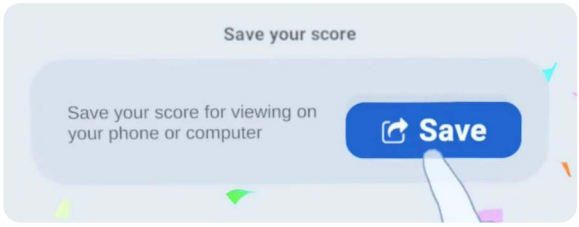
You will be mostly by yourself at this moment. Luckily enough, there is Olivia who knows where to find an AED. You can instruct her to get the AED for you. Once she brings the AED, you will have to turn it on and follow the instructions.

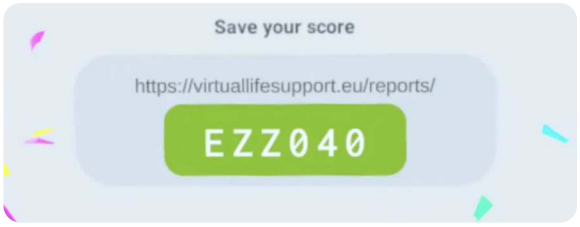
It's important that you perform all steps correctly and quickly. If you're not fast enough or do not know what to do the software will give you some visual clues. For time sensitive steps you will see a timing indicator (circle filling up).

Note that we cannot measure everything in all cases. It is for example not possible to measure whether you are actually giving two breaths. In those situations it is the intent that is important.

The software measures CPR performance by tracking the head movement, using the sensors in the headset. This works well as long as you give the compressions with stretched arms, which is the proper way of performing CPR anyway! Alternatively you can use the SimCPR® Pro Trainer to increase the accuracy of the measurements.

Near the end of the training, emergency services will arrive to take over for you. You will then get a score of your CPR performance which you will also be able to save to the web. Once you save it, you get a code that you can use on this website to retrieve your results and, should you wish to do so, save them in PDF format.


Save your score
Save your score for viewing on your phone or computer
Save


Save your score
https://virtuallifesupport.eu/reports/
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Good luck!