Virtual Reality Nature-Based User Interventions

Safety

Legal Disclaimer

The user assumes all responsibility for their actions while using the VR headset. The provider of user intervention environments, medical staff, researcher, manufacturer, distributor or any other party is not liable for any accidents, injuries, or damages resulting from the misuse or disregard of safety instructions.

Play Area

Please note that the play boundary for the VR headsets has been TURNED OFF. Safety precautions should be taken for safe use of the VR headset.

Please be aware that you must remain stationary during the use of the VR headset. Unnecessary movement can lead to collisions with objects, walls, furniture, or other people in your surroundings. Such movements pose a risk of physical injury, property damage, or device damage. Always be aware of your surroundings and the limitations of your physical space.

Hygiene

Personal Hygiene

Always maintain personal hygiene while using the VR headset. We recommend washing your hands and face before and after using the VR headset.

Cleaning

Thoroughly clean and disinfect the VR headset on a regular basis. You can clean the headset with non-abrasive antibacterial wipes. Carefully wipe the face cushion, light blocker, and nose area – as well as the headset body, including the headband adjustment wheel and buttons.

DO NOT use soap, harsh chemicals, cleaning solvents, liquids, or aerosols for cleaning the headset as they can cause damage to the device.

Clean the headset lenses very carefully due to their close contact with your eyes. Wipe the lenses gently with a microfiber lens cloth. Never put water or any chemicals on the lenses, only use the microfiber lens cloth.

Vulnerable Groups

User Group Guidelines

Children: VR headsets may affect developing vision. Children under 13 are advised to only use the headset for limited periods of time under adult supervision.

People with medical conditions: VR headsets may cause discomfort or exacerbate symptoms for people with epilepsy, seizures, motion sickness, vestibular disorders or other neurological conditions.

Pregnant women: Pregnant women should consult a healthcare provider before using the VR headsets.

People with disabilities: Visual impairments, mobility issues, or specific eye conditions may make using VR challenging.

People prone to experiencing claustrophobia: The enclosed nature of VR experiences may exacerbate feelings of discomfort or anxiety.

Health

General Recommendations

Please DO NOT use the VR headset if you are sick or have been sick during the past few days!

If you start feeling dizzy or nauseous during use, remove the VR headset immediately and take a break from using it. Sit or lie down in a comfortable position until the symptoms subside.

The VR headset can be used by most people, but certain individuals may face challenges using it comfortably or safely. If you are unsure about whether you can use the VR headset consult a healthcare provider.

By adhering to these guidelines and recommendations, as well as exercising caution, you can enjoy a safe, healthy and immersive VR experience. Remember, your safety and health are of paramount importance, so always prioritize caution and awareness when using VR technology.

VR Hardware

Using the VR-headset

VR-headset

1. If you want to use eyeglasses with the VR-headset, attach the glasses spacer (see Figure 1).
2. Loosen the top strap located at the top of the VR-headset.
3. Loosen the strap dial located at the back of the VR-headset to adjust the size of the headset (see Figure 2).
4. Put the VR-headset on (see Figure 3).
5. Ensure that the VR-headset fits snugly on your head.
6. Tighten the VR-headset by using the strap dial (see Figure 2).
7. Tighten the top strap.
8. Ensure that the VR-headset sticks to your head.
9. Ensure that the view is sharp.
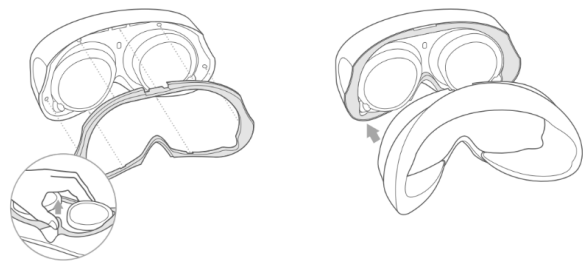10. If necessary, readjust the VR headset.

Figure 1.
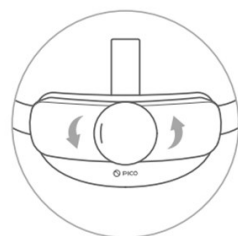Attaching the eyeglasses spacer

Figure 2. Strap-dial

Figure 3. Adjusting the VR-headset

Starting and maintaining the VR-headset

Starting the VR-headset

The VR-headset can be started using the power-button (see Figure 4 numbered item 1).

Powering on: Hold the power-button for 2 seconds.
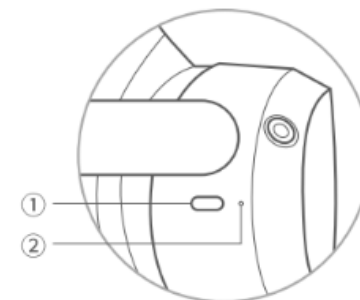
Powering off: Hold the power-button for 5 seconds.

Figure 4.
Power-button and Status-indicator

VR-headset maintenance

The VR headset has a battery life of 3 hours. The VR headset should be charged periodically.

The status indicator shows the battery level and status of the VR headset (see Figure 4 numbered item 2).

Yellow Light: Charging, the battery has less than 98% charge.

Green Light: Charging, the battery has more than 98% charge.

Blinking Blue Light: The VR headset is powering off.

Blinking Red Light: The battery has less than 20% charge.

Colorless: Sleeping or Powered Off.

VR Software

NATUREACH-Application

User guide

The **NATUREACH-application operates based on eye tracking and head tracking. You select things by looking at them. The first view, which is presented upon putting on the VR headset, is the menu with all the environments displayed (see Figure 5).**

The menu operates on a 3 second delay. Once a thumbnail of an environment has been looked at for 3 seconds the selection timer starts. The selection timer is 5 seconds, meaning that the total amount of time required to select an environment is 8 (3+5) seconds of looking at a thumbnail.

The audio heard in the environments can be adjusted by pressing the volume buttons on the VR headset.

You can exit the environment and return to the environment menu by looking down at the exit button located 90 degrees down below the horizon (see Figure 6).
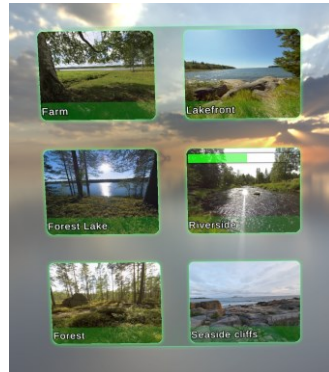

Figure 5.
Environment menu

Figure 6.
Exit-button

Assisting a Person with the VR Headset

### Screencasting the VR headset to another device

Casting the VR headsets screen requires you to connect the VR headset and the device you want to cast the screen to the same network. The screen casting should work with any device that can connect to a network and has a browser. After that follow these steps:

1. **Open the library on the VR headset.**
2. **Open the screencast application.**
3. **Select the option to Cast to Browser.**
4. **Open a web browser on the device you want to cast to.**
5. **On the other device, go to the address you see in the screencast application.**
6. **Press the option to Start Screencast on the website.**
7. **You should see a pop-up on the VR headset. Press Allow on the pop-up.**
8. **You should now see the VR headsets screen on the other device.**

Navigating the NATUREACH-application with the controllers

The **NATUREACH-application can be operated via the controllers. You can press the A button to go into the environment the person using the VR headset is currently looking at.**

Once an environment has been selected, the assisting person can press the B button to go back to the environment menu.
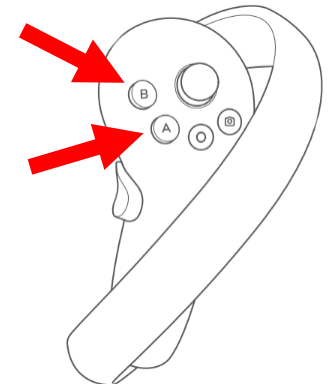
NATUREACH

Contact Information

If you encounter any issues or have any questions you can contact the following persons:

Martin Gärdemalm: Any questions regarding the nature environments.
Email: martin.gardemalm@slu.se
Phone number: +4673-0589172

Joni Piispanen: Any questions or feedback regarding the NATUREACH-application, general technical questions regarding VR headsets (e.g., buttons, controllers, battery etc.), and questions regarding screen sharing.
Email: joni.piispanen@uwasa.fi
Phone number: +358 29 449 8546

Johan Jirlén: General technical questions.
Email: johan.jirlen@ltu.se