



Somnium VR1 Headset User Guide & Safety Manual (English Version)

Introduction

Welcome Message

The Somnium VR1 headset represents a significant advancement in virtual reality technology, engineered to provide an exceptionally immersive experience. With its cutting-edge design and high-performance components, this device excels in various applications, from exploring detailed virtual environments to participating in complex simulations and research. The headset is designed, developed, and manufactured in Europe, ensuring high quality and attention to detail. Whether used for gaming, simulations, or professional work, the Somnium VR1 is built to deliver a superior level of immersion and precision in virtual reality.

Overview of the Somnium VR1 Headset and Its Capabilities

The Somnium VR1 headset is a marvel of modern virtual reality technology. It features state-of-the-art displays, precise tracking, specially designed dual-stack aspheric lenses with a broad field of view for an intensely immersive experience. Its unique mixed reality capabilities allow for a seamless integration of virtual content with the real world, offering interactive and captivating experiences like no other. Designed for comfort and equipped with intuitive operation, the Somnium VR1 is your ticket to exploring the vast possibilities of virtual and mixed reality.

In the Box

Opening your Somnium VR1 package, you will find the essentials needed to embark on your virtual reality adventures (*content of the box and the box itself may differ depending on the purchased VR1 variant):

- **Somnium VR1 Headset:** The cornerstone of your virtual reality exploration, crafted for immersive experiences and comfort.
- **Hybrid Optical Cable with Proprietary Connectors:** A single, versatile 6-meter-long hybrid optical cable featuring a proprietary USB-C connector for the headset and a breakout box with DisplayPort and USB-A connectors for your PC connection. The main cable is securely attached, eliminating the risk of disconnection during use.
- **Accessories:** The package includes additional tools and accessories such as screwdrivers, extra screws, and a cleaning cloth to help you maintain your headset.



Please note: The Somnium VR1 headset does not come with hand controllers. It is designed to be compatible with a wide range of third-party lighthouse tracked controllers or utilizing use of hand-tracking, allowing you to choose the best option to suit your virtual reality needs.

With these components and the powerful capabilities of the Somnium VR1 headset, you are all set to dive into the immersive world of virtual reality. Follow the instructions in this manual for setup guidance and to get the most out of your VR experience.

Getting Started with Your Somnium VR1 Headset

To embark on your virtual reality journey with the Somnium VR1 headset, follow these straightforward steps to set up your device and software. No Somnium account is required, simplifying the process and getting you into VR quicker.

- **Download the Required Software:** Visit the sommniumspace.com/download/vr1software to download the latest version of the Somnium VR1 software. This software is essential for operating your VR1 headset and accessing a wide range of virtual reality experiences.
- **Install the Software:** Once the download is complete, run the installer and follow the on-screen instructions to install the Somnium VR1 software on your computer. This process should be straightforward, but if you encounter any issues, refer to the troubleshooting section of this manual or into our Discord server for more help.
- **Connect the Somnium VR1 Headset:** Using the hybrid optical cable, connect the proprietary USB-C end to your VR1 headset.
- **Connect the other end of the cable to your PC using the breakout box,** plugging the DisplayPort and USB-A connectors into their respective ports on your computer.
- **Connect the power cable to the breakout box** and plug it into a power outlet to supply power to your headset.
- **Launch the Somnium VR1 Software:** Once everything is connected, launch the Somnium VR1 software you installed earlier. The software will guide you through any additional setup steps required, including firmware updates or calibration processes to ensure optimal performance of your VR1 headset.
- **Adjust the Headset for Comfort:** Before diving into virtual reality, take a moment to adjust your Somnium VR1 headset for the best fit. The headset is designed for comfort during extended use, but proper adjustment is key to an immersive and enjoyable VR experience.



- **Explore Virtual Reality:** With your Somnium VR1 headset set up and adjusted, you're ready to explore the vast possibilities of virtual reality. Whether it's gaming, education, or social VR, the Somnium VR1 provides a gateway to countless virtual worlds.

Remember, no Somnium account is needed to enjoy the VR1 headset and software, making it easier than ever to step into virtual reality. Should you have any questions or require assistance during setup, consult the troubleshooting section of this manual or contact Somnium VR1 support for help.

Maintenance

Maintaining the cleanliness and functionality of your Somnium VR1 headset and any compatible controllers is crucial, especially when the device is used by multiple people. Regular cleaning not only ensures the longevity of your headset but also maintains a hygienic virtual reality experience.

Guidelines for Cleaning the Headset and Controllers:

- **Power Off Before Cleaning:** Always disconnect the headset from any power source before cleaning to prevent damage or electrical hazards.
- **Soft Cloth:** Use a soft, dry microfiber cloth to gently wipe down the headset.
- **Lens Care:** For cleaning the lenses, use an included lens-specific microfiber cloth. Avoid applying pressure and make circular motions gently to avoid scratching.
- **Avoid Harsh Chemicals:** Do not use alcohol, solvents, or abrasive cleaners, as these can damage the headset's surface and lenses.

Product and Safety Information

Safety Warnings and Health Advice for Users

Using the Somnium VR1 headset involves certain safety considerations to prevent injury and ensure a comfortable experience. Always ensure your play area is clear of obstacles and sufficiently spacious to avoid collisions or tripping. If you feel dizzy, nauseous, or experience visual discomfort, discontinue use immediately and rest until you feel better.

Detailed Intended Use and High-risk Use Warnings



The Somnium VR1 headset is designed for indoor use for immersive virtual reality experiences. It is not intended for children under 13 years of age. The headset should not be used for high-risk applications where malfunction could lead to serious bodily injury or life-threatening situations. Avoid using the headset to control real-world systems where dependability is critical.

Information about the Product Label

The model name and serial number of your Somnium VR1 headset are located on the product label, which can be found at the bottom left of the headset or within the device's software settings menu. This information is crucial for support and warranty services.

Detailed Health and Safety Warnings

- **Discomfort:** Initial VR sessions should be kept short to avoid discomfort. Gradually increase usage time as you become accustomed to the virtual environment.
- **Safe Environment:** Use the headset in a safe, open area free from sharp objects, furniture, and other potential hazards.
- **Overuse:** Prolonged use of VR can lead to fatigue, diminished eye coordination, and even impact balance. Take regular breaks every 30 minutes to rest your eyes and body.
- **Repetitive Stress Injuries:** Use ergonomic practices to hold and operate controllers to avoid strain. If you experience discomfort in your hands, wrists, or other body parts, take a break and seek medical advice if necessary.
- **Interference with Medical Devices:** The VR1 headset emits electromagnetic fields that could interfere with pacemakers, hearing aids, and other medical devices. Users with such devices should consult their physician before using the VR1.

Specific Advice on Hearing Loss, Seizures, and Lack of Eye Protection

- **Hearing Loss:** To prevent potential hearing damage, start with a low volume and adjust as needed. Avoid prolonged exposure to high volumes.
- **Seizures:** A small percentage of people may experience seizures or blackouts triggered by light flashes or patterns seen in VR. Immediately discontinue use if you experience any of these symptoms and consult a doctor.
- **Lack of Eye Protection:** The VR1 does not provide physical protection to your eyes from external objects. Remain aware of your surroundings to avoid injuries.



Electrical Shock and Safety Information

- Do not attempt to open or modify the headset's electronic components as it could result in electrical shock and **will void the warranty**.
- Ensure all cables and connections are securely in place to avoid potential hazards. Handle charging cables and connections with care to prevent electrical shorts or shocks.
- Improper handling may allow dust particles to enter, leading to potential damage to the electronics and optical stack.

Care and Maintenance Tips

- **Handling:** Always handle the VR1 headset gently and store it in a safe, dry place when not in use.
- **Exposure to Light:** Avoid exposing the headset to direct sunlight or intense light sources, which can damage display components and reduce the lifespan of the device.
- **Temperature Considerations:** Do not operate or store the device in extreme temperatures. Ideal operating temperatures are between 10°C to 40°C (50°F to 104°F).

Following these guidelines will help ensure a safe and enjoyable experience with the Somnium VR1 headset.

Technical Specifications for Somnium VR1 Headset

The Somnium VR1 is a high-end PC VR headset that features advanced specifications suitable for immersive virtual reality experiences:

- **Display:** The headset is equipped with QD-LCD panels with Mini LED technology, providing a resolution of 2880×2880 pixels per eye, ensuring sharp and vivid visuals.
- **Field of View:** It boasts up to 135° horizontal field of view and up to 105° vertical field of view, offering a more immersive experience.
- **Refresh Rate:** The base refresh rate is 90 Hz, with options to switch to 72 Hz, 120 Hz and even 144 Hz* for smoother visual performance (*subject for availability in the future software updates)
- **Tracking:** It uses lighthouse photodiodes compatible with SteamVR compatible base stations for precise positional tracking.
- **IPD Adjustment:** The inter-pupillary distance (IPD) can be adjusted from 58mm to 75mm, accommodating a wide range of users.



- **Weight:** The base weight of the headset is 700 grams, with a design that balances the weight across thick top and back straps to support HMD comfortably.

Operating and Storage Environment

- **Operating Temperature:** The ideal operating temperature range is 10°C to 40°C (50°F to 104°F).
- **Storage Temperature:** The headset should be stored in conditions where temperatures range from 10°C to 50°C (50°F to 122°F).
- **Humidity:** Suitable for operating in non-condensing humidity conditions from 10% to 70%.
- The headset is not waterproof and should be kept away from water or moisture to prevent damage.

Compliance and Recycling

CE

- The device complies with the Directive 2014/53/EU.
- Full declaration of conformity is available at www.sommiumspace.com/compliance

FCC

- FCC ID: 2BKF7-VR1BESTHMD
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - (1) Reorient or relocate the receiving antenna.
 - (2) Increase the separation between the equipment and receiver.
 - (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - (4) Consult the dealer or an experienced radio/TV technician for help.

- FCC caution: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED

- IC: 32914-VR1BESTHMD
- This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.
- *L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) L'appareil ne doit pas produire de brouillage; (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Radio frequencies

Component	Frequency	Max power	Max power EIRP
Headset	2402-2480MHz	1.6mW	2.1mW

RoHS

- This device complies with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) and its amendments.

WEEE

- This device complies with the Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE).
- Do not dispose of the device as unsorted municipal waste, rather take it for recycling. Check the local regulations for proper disposal of electronic products.

California Proposition 65

⚠WARNING: This product can expose you to chemicals including Styrene, which is known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Troubleshooting for Somnium VR1

Common Issues and Their Solutions



- **Connectivity Problems:** Ensure that all cables are securely connected to both the headset and your PC. Check the integrity of the breakout box connections if you experience intermittent signal.
- **Display Issues:** If you encounter poor image quality or flickering, please try powering off and back on or try adjusting the refresh rate settings and ensure that the display cable is properly connected and free of damage.
- **Tracking Difficulties:** For tracking issues, verify that the SteamVR base stations are set up correctly and that there are no obstructions blocking the sensors.

Contact Information for Customer Support

For further assistance with the Somnium VR1 headset, you can reach out to customer support through the official Somnium website. We provide support for setup issues, technical difficulties, and warranty claims.

These details should help you get the most out of your Somnium VR1 headset and troubleshoot common issues effectively. For any additional information or specific queries, contacting Somnium customer support directly would be advisable.

Warranty and Return Policy

The warranty for the Somnium VR1 headset is valid according to the laws and regulations applicable in the region of purchase, whether under European consumer protection laws or relevant U.S. laws. Customers are entitled to return the product within the legally defined period based on the specific consumer rights of their region.

This warranty is valid only for headsets purchased from authorized retailers and directly from our website.

Please note that our warranty does not cover damages resulting from improper use, accidents, or modifications. Given that the VR1 headset features four anchor points allowing for modular component attachment, users are permitted to screw in and out parts as needed. However, the warranty does not cover damages caused by using incorrect screws or modifications that alter the device's functionality or integrity. Customers are encouraged to handle all components with care to avoid voiding the warranty.

Returns Policy

Under applicable consumer protection laws, customers have the right to return the Somnium VR1 headset within a specified period after receiving it, without needing to provide a reason. To qualify for a return, the item must be unused, in its original condition, and packaged as it was when initially received. Customers are responsible



for ensuring the product is adequately protected during shipping back to our headquarters.

Upon receipt and inspection of the returned item, we will notify you of the approval or rejection of your refund. If approved, the refund will be processed, and a credit will automatically be applied to your original method of payment within a certain amount of days.

For detailed information on how to initiate a return or claim under warranty, please refer to the documentation provided with your purchase or visit our official website. Here, you can also find contact information for our customer service team who can assist you with any queries related to warranty claims or returns.

This warranty and returns policy ensures that our customers receive not only a high-quality virtual reality headset but also the assurance of support throughout their experience with Somnium products.

Residents of the following EU countries are eligible for the right of withdrawal: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden. If your country is not listed here, the standard terms and conditions of Somnium Space regarding returns or exchanges will apply. This information ensures that all our customers are aware of their rights and the procedures for returning products under EU consumer laws.