



## V8 User Guide



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## **Introduction**

Thank you for purchasing the Virtual Research V8 Head Mount Display (HMD). This V8 User's Guide describes the contents of the V8 HMD and control box along with operational guidelines, instructions and care for the V8. Please review this guide carefully and follow instructions to insure correct use and care for your HMD. Please feel free to contact us with any questions you may have. You can reach us at: [info@virtualresearch.com](mailto:info@virtualresearch.com)

## **Section One: Safety Issues**

### **Electrical Shock Hazard**

The desktop power supply included with the V8 produces 24VDC. This voltage is also present on the HMD cable bundle, but should not be a hazard to the user. The circuitry in the HMD produces a high voltage (>500VAC) spike signal to drive the backlight. This voltage is generated at very low current levels and will cause only a moderate sensation when touched. This voltage is accessible only if the HMD is disassembled. DO NOT DISASSEMBLE THE V8.

### **Blocked Vision and Hearing**

By its nature, a head mount display blocks the user's sight and hearing. The danger of tripping over cables or other obstacles becomes a real concern while immersed in the virtual world. As system manager, you must provide an environment that does not allow the HMD user to fall or otherwise injure him/herself. We recommend using V8 only while seated to avoid tripping hazards.

### **Eyestrain/Other Optical Effects**

V8 will cause eyestrain if the IPD is set incorrectly. Like all head mounts, it is likely to cause some eyestrain effects even when correctly adjusted. This eyestrain stems from several causes; with perhaps the most significant being the fixed focal plane, which conflicts with the variable depth cues present in the imagery. There is no technology that we are aware of that corrects this conflict. Other sources of eyestrain could include optical aberrations, distortion, and mismatch of computer imagery with mechanical configuration. If you experience noticeable eyestrain, review and correct your adjustments and software configuration. If eyestrain persists, limit or end your use of the HMD. Please contact Virtual Research if you have questions or concerns about eyestrain.

### **Lice/Other Pest Transmission between Users**

Although we have not had any instances of user's reporting lice transmission to us, there has been at least one anecdotal report of lice transmission in a public use HMD. There are sprays available that will kill lice on furniture and clothing. Two of these are RID and A-200. Both are available in drug stores. We don't have information on the effectiveness of these sprays on HMDs and encourage you to research this if you are considering a multiple user application. These sprays are hazardous and you need to judge the benefits vs. risks of using them. Alcohol wipes are useful for cleaning the HMD between users. Alcohol will remove skin, oil and makeup that have been transferred to the HMD. As far as we know, alcohol has no effect on lice.

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