# VersaEye™

Model VE-1 User's Guide: English



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### Versa Support

versa@prc-saltillo.com

### **Contact Information**



Manufacturer

Prentke Romich Company 1022 Heyl Rd Wooster, OH 44691

Tel.: +1 330 262-1984 · +1 800 262-1984

Fax: +1 330 262-4829 Email: info@prentrom.com Web: www.prc-saltillo.com/

EC REP EU Authorised Representative

Prentke Romich GmbH Karthäuserstr. 3 D-34117 Kassel Germany

Tel.: +49 (0) 561 7 85 59-0 Fax: +49 (0) 561 7 85 59-29 Email: info@prentke-romich.de Web: www.prentke-romich.de/

EU Importer

Prentke Romich GmbH Karthäuserstr 3 D-34117 Kassel Germany

Tel.: +49 (0) 561 7 85 59-0 Fax: +49 (0) 561 7 85 59-29 Email: info@prentke-romich.de Web: www.prentke-romich.de/

UK Responsible Person and Importer

Liberator Ltd

"Whitegates", 25-27 High Street Swinstead, Lincolnshire NG33 4PA

Tel.: +44 (0) 1733 370 470 Fax: +44 (0) 1476 552 473 Email: info@liberator.co.uk Web: www.liberator.co.uk/

### **Authorised Representative in Australia**

Liberator Pty Ltd 265, Gilbert Street, Adelaide, SA 5000 Australia

Tel: +61 (0) 8 8211 7766 Email: info@liberator.net.au Web: www.liberator.net.au/

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### **Safety Information**

### **Emergencies**

⚠ The system is not intended to be an emergency call device or sole communication aid.

### Cleaning, Maintaining, and Servicing

- △ Do not attempt to disassemble, service, or repair the eye tracking module. Only a technician will be able to disassemble the module and replace a part. If a product component or accessory is damaged, call Service for assistance.
- $\triangle$  Never use abrasives or cleaning cloths that will scratch the transparent area of the module.
- ⚠ Use a microfiber (lint-free) cleaning cloth to wipe module's enclosure and transparent area.
- ⚠ If the module needs more than a dry wipe-down, dampen this cloth or another lint-free cloth. Damp means wrung out, never dripping. Dry the unit thoroughly with a dry lint-free cloth.
- ⚠ If the transparent area gets smeary or visibly dirty, place a small amount of rubbing alcohol on a lint-free cloth and gently wipe it. Polish the area with a dry part of your cloth.
- $\triangle$  Keep the microfiber (lint-free) cloth handy and wipe the transparent area daily.

### **Accessories**

- △ Do not use accessories, detachable parts, or materials not described in the instructions for use.
- △ Do not use accessories, detachable parts, or materials in any other way than described in the instructions for use.

### **Mounting and Positioning**

- Any mounts used should be fitted by a qualified person. Failure to install the mounting system according to the manufacturer's instructions may result in an injury to the user. Be certain that the user's view is not obstructed by the mounting.
- △ Analysis of positioning by a qualified person is required to prevent repetitive stress injuries to the user.
- △ Consult your vision care provider about module positioning considerations for the user.

### Small Parts, Cords, Cables, and Straps

- △ Cords, cables, and straps are potential entanglement or strangulation hazards. Please consider this prior to placing these items with users.
- ⚠ On a regular basis, visually inspect cables, cords, and connectors for damage or wear, especially where they are subject to extra stress. Cables and cords can become frayed or damaged from heavy use or with age. For example, a frayed cable could cause a battery charger/power adapter to short-circuit, posing a hazard to the user.
- ⚠ When unplugging a cable or cord, grasp the connector instead of the cable or cord itself to avoid damage or wear.
- $\triangle$  Always use cables according to the instructions for use.
- ⚠ Small parts could present a choking or other hazard.

### Interference

- ⚠ When operating this product in a medical environment, do not use with any product that is not medically approved. Follow all rules for appropriate wireless product use.
- △ Do not use this product close to sources of RF/RFID radiation or you may encounter interference. Move away, if possible, from the source of the interference.

### Water

This product is intended for use in normal situations. It is not waterproof. Do not immerse it in water. Do not spray or splash liquid directly on it and use extreme caution when using it around water. Never use the product when you are actually in the water (for example, a pool or bath).

### Heat

- ⚠ Do not place the product in an appliance such as a microwave or oven, near an open flame, or on or near a source of heat such as a stove or heater.
- ⚠ Do not leave the product in a hot vehicle for a prolonged period.

### Damage

 $\triangle$  Do not use the product or any accessory that is cracked or broken.

#### **Environment**

- ⚠ Do not use the system in an environment in which explosive or flammable gases could be present.
- ⚠ Do not take the product into an oxygen-rich environment (operating room, oxygen tent, etc.).
- ⚠ Dispose all electronic components according to local regulations.

### **Fatigue**

- ⚠ While the user is getting used to eye tracking, take frequent breaks to rest the user's eyes and relax his or her concentration.
- △ Some people may experience a certain amount of fatigue (due to intentional eye focusing and hard concentration) or even a dryness of the eyes (due to less frequent blinking) when first getting used to eye tracking. If you are experiencing fatigue or dry eyes, start off slowly and limit the length of your eye tracking sessions to your comfort level. Moisturizing eye drops can be helpful to combat dryness.

### Seizures

△ Some people may have epileptic seizures triggered by light flashes or patterns. This may occur while presented successive pictures or video material, even if they have never had a seizure before. Observe the individual using the product. Move the person away from the system immediately and consult a physician if the individual shows the following or similar symptoms: involuntary movements, disorientation, convulsions, loss of awareness, or altered vision.

### Infrared Emissions

A Your eye tracking system uses infrared (IR) technology. Certain medical devices are susceptible to disturbance by IR emissions. Do not use the eye tracking system when in the vicinity of such susceptible medical devices. If you have questions about the susceptibility of a medical device, consult the manufacturer of the medical device or your health care provider.

#### **Implantable Medical Devices**

A minimum of six (6) inches should be maintained between a wireless product and an implantable medical device, such as a pacemaker, implantable cardioverter defibrillator, vagus nerve stimulator, shunt, or stent, to avoid potential magnetic interference with the medical device. Persons who have such devices:

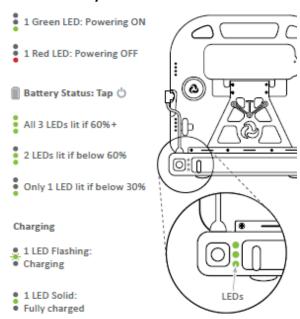
- Should ALWAYS keep the product a minimum of six (6) inches from their implantable medical device;
- Should not carry the product in a breast pocket;
- Should move the product away from themselves immediately if there is any reason to suspect that it is interfering with the implantable medical device;
- Should read and follow the directions from the manufacturer of the implantable medical device. If you have any questions about using the product with an implantable medical device, consult your health care provider.

### **Identifying VersaEye Components**

Eye tracking allows individuals who are unable to use their hands to alternatively use eye movements to control where the pointer moves on the screen. VersaEye™ uses the camera on the Hiru eye tracking module by IRISBOND to translate your eye movements into pointer movements and activations/selections on the screen of your iPad®.

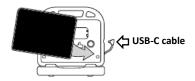


### **VersaEye Power Button and LEDs**



# Connecting the VersaEye to Your iPad

1. Set the bottom of the iPad at angle and insert the right corner.



- 2. Press the left bottom corner into place.
- 3. Carefully work the upper right corner of the iPad into the case, followed by the upper left corner.
- 4. Insert the USB-C cable from the VersaEye into the USB-C port of the iPad.



5. Start your iPad.

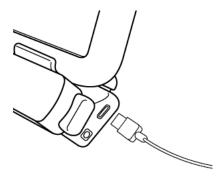
### **Setting up Eye Tracking**

- 1. Connect to Wi-Fi®.
- 2. Open the App Store® and search for IRISBOND Hiru.
- 3. Select **GET**.



Important! Do not select Open yet.

4. Connect the charger to the VersaEye port.



Note: This will charge the VersaEye batteries and your iPad.

- 5. Turn VersaEye on by holding the power button for three seconds.
- 6. Select Open.



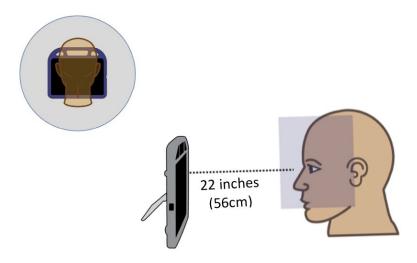
7. The Hiru app opens.



- 8. If the yellow **Update Hiru** button appears, go to the iOS **Settings**, select **Display & Brightness**, and set Auto-Lock to Never during updates.
- 9. Return to the Hiru app, select **Update Hiru**, and proceed with the update.
- 10. When the update is complete, restart the iPad and VersaEye module.

### **Positioning the User**

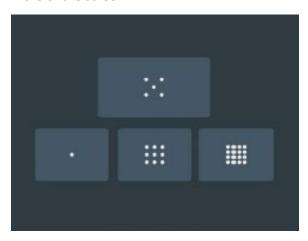
- Analysis of positioning by a qualified person is suggested to ensure proper use and setup of the Hiru module.
- ☑ The user's eyes should be looking into the upper 1/3 of the screen.



- Position the user approximately 20-22 inches from the device screen. Actual distance may vary from user to user or if you wear glasses.
- ☑ If the camera sees your pupils (which are used for tracking) the white light will appear on top of the module. If you look around the screen, this light should remain stable and always lit you are using the Hiru module. If you see flicker with this light, adjust your positioning.
- If someone is sitting beside the user, try to position the device to face the user as much as possible. If the camera detects the other person's eyes, the eye tracking system will choose whichever eyes it sees most clearly.

# **Calibrating Eye Tracking**

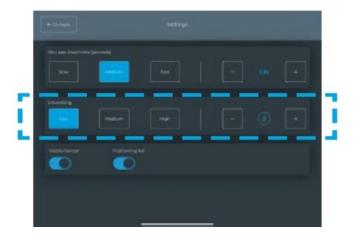
The number of Calibration Points determines the number of stimulus points you will look at during calibration. The more points you follow accurately, the more accurate control the user will gain over more of the screen.



# **Adjusting Smoothing**

Smoothing changes the sensitivity of the cursor.

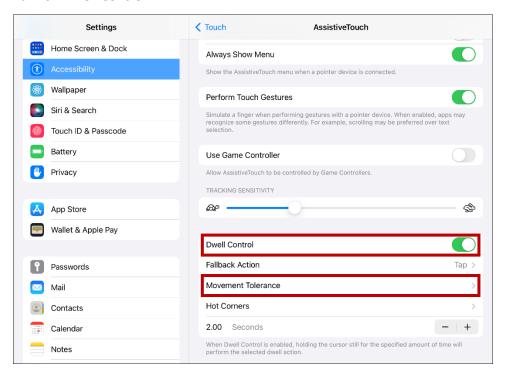
- Lower values will be more sensitive to eye and head movements.
- Higher values will be less sensitive to eye and head movements.



### **Using iOS Dwell Control to Make Selections**

When you turn on Dwell Control in the iOS Settings, holding the cursor still on an item for a specified time selects the item.

- 1. Go to the iOS **Settings** and select **Accessibility** > **Touch** > **AssistiveTouch**.
- Turn on Dwell Control.

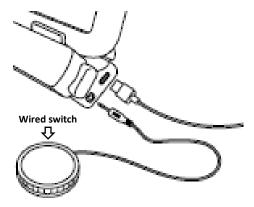


- 3. Select Movement Tolerance and adjust the distance the cursor can move while dwelling on an item.
- 4. Adjust Dwell Time.

# **Using a Switch to Make Selections**

You can use a Bluetooth® wireless switch or a 3.5 mm wired switch to make selections.

1. Connect a wireless switch to the VersaEye module via Bluetooth or plug a wired switch into the 3.5 mm port in the module.



- 2. Move the cursor to the item you want using your eyes.
- 3. Activate the switch to tap, double-tap, or hold and drag.

### **Additional Resources**

These documents were included with your VersaEye.

VersaEye Installation and Setup Guide

VersaEye Safety and Compliance Information

For warranty and additional information, visit:

https://www.prc-saltillo.com/versa

### **Appendix: Compliance Information**

For Hiru eye tracking module compliance information, compatibility information, or specifications, see the iOS-specific sections in the Hiru Eye Tracker Quick Start Guide for iOS devices or the Hiru Eye Tracker User Manual.

#### Federal Communications Commission (FCC) Warning

This module complies with Part 15 of the FCC Rules. Operation is subject to two conditions: (1) this module may not cause harmful interference, and (2) this module must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this product not expressly approved by PRC-Saltillo could exceed FCC limits and negate your authority to use this product.

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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Innovation, Science and Economic Development Canada (ISED) Warning

This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux Innovation, Sciences et Développement économique Canada (ISDE) applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### **Product Intended Purpose**

The VersaEye eye tracking system tracks eye movement, allowing users with restricted muscle control to fully access communication software. The module attaches to the user's iPad, which can be mounted to a wheelchair or table stand. The module does not incorporate in any way medicinal substances, human blood or plasma derivatives, nor is it manufactured using tissues of animal origin.

### **Expected Service Life**

The expected service life of the equipment is three years.

If you dispose of your equipment, please dispose of it in accordance with your local, state, and/or country electronic recycling laws.

### **Intended Operators**

The individual using a device with the module attached to communicate, the individual's communication partner, and/or the person changing device settings, maintaining software files, etc. are the intended operators.

#### **Expected Position of Operators**

The module is connected to the device via a VersaWrap™ and cradle. With the module attached, the device is expected to be within 20 to 26 inches of the individual's body. The distance will vary according to whether the device is mounted on a wheelchair or table.

### Special Skills, Training, or Knowledge Required

No special skills or training are required to operate or maintain the system. The pictures and text in the instructions for use will help the operator acquire the knowledge to achieve the intended use of the system.

### Instructions for Use

- All functions of the product are safe for use by the user. For best results, follow the instructions provided with the product.
- For instruction on proper mounting of components, see the instructions for use provided with the product.
- For information on cleaning the module, see "Cleaning, Maintaining, and Servicing" under "Safety Information" on page 3.

### **Contact Information for Assistance**

If you need assistance in setting up, using, or maintaining the system or if you need to report unexpected operation or an unexpected event related to the system, please contact versasupport@prc-saltillo.com or visit prc-saltillo.com/versa. For products purchased directly from Amazon, contact Amazon for support. To report any serious incident associated with the module, also contact your national authority.

### **Instructions for Storage**

If you will be leaving the system in storage for a long period of time, be sure to turn all equipment off. Equipment with batteries in storage must be charged every six months.

### **Explanation of Symbols**

This section explains all symbols that appear on all PRC-Saltillo devices, accessories, or packaging. To find an explanation for any symbol that appears on your VersaEye, simply scroll down through this table until you find it.

Symbol	Explanation
Æ	The device is Federal Communications Commission (FCC)-compliant.
CE	The device conforms to European Union health, safety, and environmental standards.
UK CA	The device conforms to the requirements of the UK MDR 2002.
IC	The device complies with Innovation, Science and Economic Development Canada license-exempt RSS standard(s).
<b>&amp;</b>	The device complies with applicable ACMA technical standards for telecommunications, radiocommunications, EMC, and EME.
<u>^</u>	Caution! Use caution when operating the device to avoid undesirable consequences.
((**))	The device emits generally elevated, potentially hazardous, levels of non-ionizing electromagnetic radiation.
	Recycle electronic equipment. Do not throw the device in the trash.
IP22	The device is protected against solid objects 12.5 mm and greater and water dripping vertically at up to a 15-degree angle.
<del>*</del>	Keep dry. The device needs to be protected from moisture.
1	The range of temperatures to which the device can be exposed while in use or while in transport or storage.  Caution: If the device has been stored in an environment in which the temperature range is different from the range of temperatures to which the device can be exposed while in use, let the device stand for at least 30 minutes before using it.
<u></u>	The range of humidity to which the device can be exposed while in use.
<b>₩</b>	The range of atmospheric pressure to which the device can be safely exposed while in use, transport, or storage
	Follow the instructions for use. Refer to the instruction manual.
<u> </u>	Consult the instructions for use.
*	The device employs Bluetooth wireless technology.
#	The device model number.
SN	The device serial number.
^^^	The date of manufacture of the device and the name and address of the manufacturer.
MD	Indicates a medical device.
EC REP	The authorized representative in the European Community.
UK REP	The responsible person in the United Kingdom.

#### Classifications

Protection against electrical shock	Class II / Externally powered
Protection against harmful ingress of water	IP22
Mode of operation	Continuous
Type of applied part	BF

### **Hiru Module Specifications**

For complete Hiru eye tracker module specifications, go to https://www.irisbond.com/en/support-service/user-manuals-and-guides/ and see the Hiru Eye Tracker Quick Start Guide for iOS devices or the Hiru Eye Tracker User Manual.

### **VersaEye Specifications**

Compatible with iPadOS 17 and above on:	<ul> <li>iPad Air (5th Gen or later)</li> <li>iPad Pro 11-inch (3rd Gen or later)</li> <li>iPad Pro 12.9-inch (5th Gen or later)</li> </ul>
Weight	1.85 lbs.
Dimensions	12 in. x 11.7 in. x 2 in.
USB connector	USB-C
Ports	3.5 mm external switch jack for accepting wired switch input
Battery life	7 hours
Standard components	Hiru eye tracker module, cradle, charger

### **Operating Environment**

Ambient temperature	0°C to 40°C (32°F to 104°F)	
Relative humidity	10% to 90%	
Atmospheric pressure	80 kPa to 106 kPa	
The device needs to be protected from moisture during use.		

### **Transport and Storage Environment**

While in transport or storage, the range of temperatures to which the device can be exposed is -20°C to  $60^{\circ}$ C (-4°F to  $140^{\circ}$ F), with an atmospheric pressure range of 80 kPa to 106 kPa.

### **Device Charging Warnings**

- $\triangle$  While the device is charging, touching the surface of the device with broken skin may aggravate a wound.
- ⚠ While the device is charging, infants or high-risk groups should not touch the surface of the device if there is a chance of burning the skin.