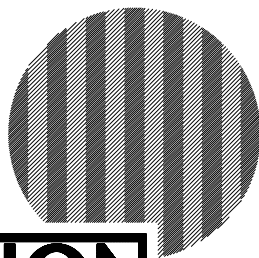
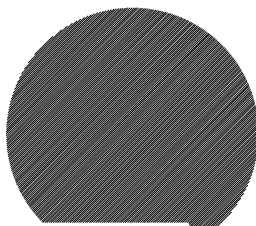
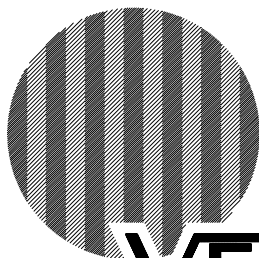
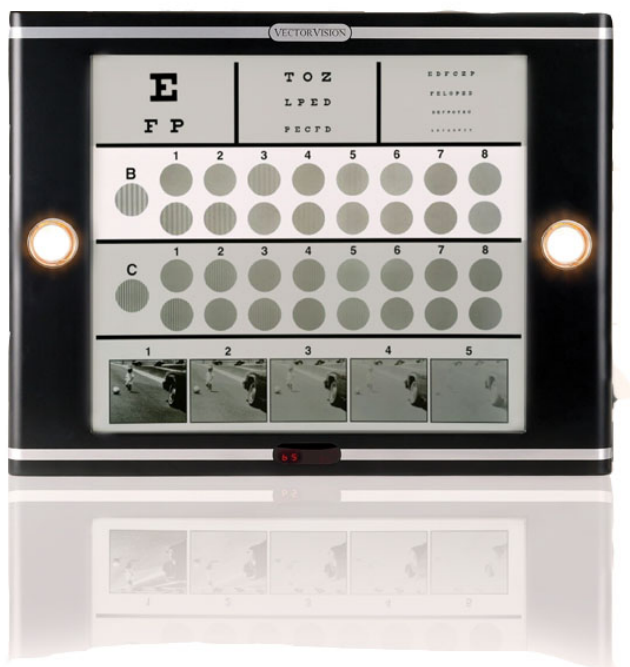


# CSV-1000 HGT INSTRUCTION MANUAL



**VECTORVISION™**



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## Introduction

CONGRATULATIONS on your purchase of the standardized CSV-1000 vision testing instrument. The device is CE marked and RoHS compliant.

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE USING YOUR CSV-1000 INSTRUMENT. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. FAILURE TO FOLLOW INSTRUCTIONS, WARNINGS AND CAUTIONS MAY RESULT IN SERIOUS PERSONAL INJURY, PROPERTY DAMAGE AND/OR MAY VOID THE WARRANTY.





## Service & Important Safeguards

### Service Information

**WARNING:** Any repairs requiring disassembly should be performed by VectorVision personnel. There are no user serviceable parts except for two (2) halogen glare lamps and the battery in the remote control.

**WARNING:** To reduce the risk of fire, electrical shock, injury, or damage to the instrument, please observe the following:

Do not use if instrument is damaged in any way.

Use this instrument only for its intended purpose as a standardized vision test.

Never leave the CSV-1000 plugged in during long term storage.

Never insert or drop objects into any opening or crevice in the instrument.

Do not use on or near hot surfaces.

Only use the power cord supplied with the instrument. Do not use this power cord with any other instrument.

To protect against risk of electrical shock, do not put the power cord in water or other liquid.

Do not allow the power cord to hang over the edge of a table or touch hot surfaces.

Do not operate if power cord is damaged.

If the instrument is not functioning normally or has been dropped or damaged in any way, return to VectorVision for repair or replacement.



## Product Specifications

Input Voltage: 100VAC - 240VAC, 47-63Hz

Light Source - Glare: 12v20w BAB/CG MR16

Dimensions: 27.4375"W x 21"H x 3.9375"D (69.69 cm x 53.34 cm x 10 cm)

Weight: 30 lbs (13.6 kgs)

## Calibration of the CSV-1000

Calibration of the instrument is performed at the factory before it is shipped to the user. The back light sources are calibrated to provide a light level at the testing surface of  $85 \text{ cd/m}^2$ . The glare source is calibrated so that the glare intensity simulates a pair of oncoming halogen car headlights as viewed from a distance of 150 feet.

Calibration of the instrument by the user is not advised and may invalidate the warranty. The user can change the intensity of the glare sources during testing. If the user chooses to change the glare intensity from the calibrated factory level, it is recommended that the user record the glare source intensity as indicated by the digital read out on the front of the instrument.



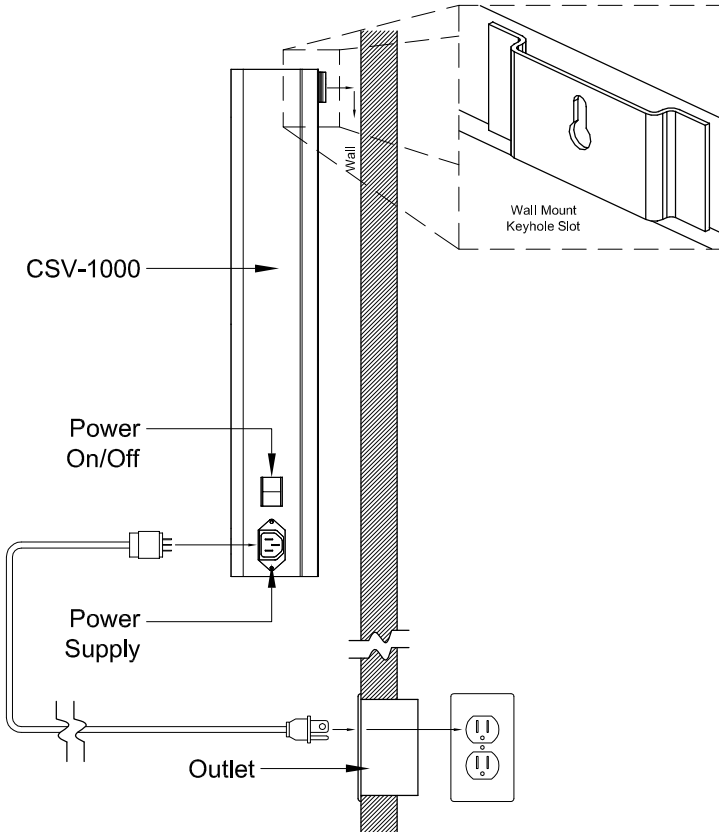
## Mounting Instructions

### Mounting to a Wall

FAILURE TO SECURELY MOUNT THE INSTRUMENT ON A WALL OR OPTIONAL FLOOR STAND MAY RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE AND MAY VOID THE WARRANTY.

### Wall Mounted

The back of the CSV-1000 instrument has (2) keyhole slots that are 16-inches apart (40.64cm). Use fasteners designed for a wall mounting that have a rating of at least 60 lbs (9 Kgs).

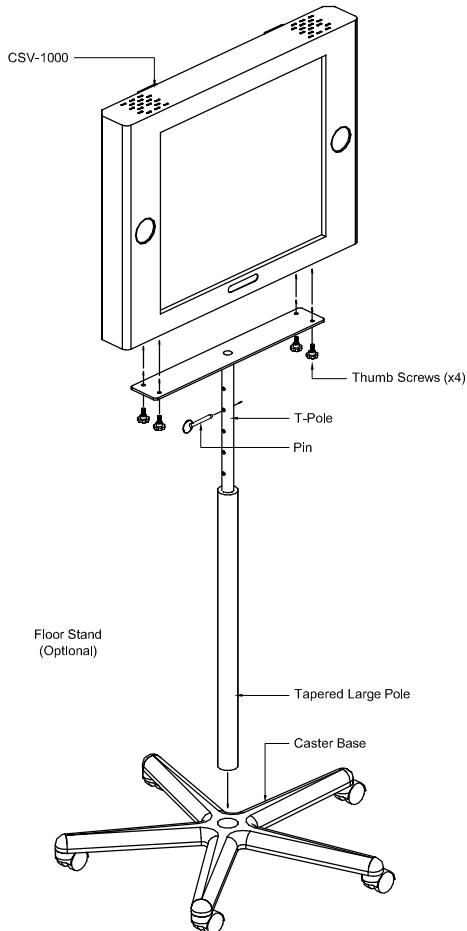




## Mounting Instructions (Continued)

### Floor Stand Mounted (Optional)

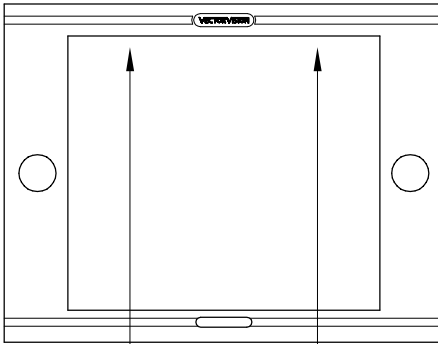
1. Insert tapered end of large pole into the caster base.
2. Attach T-pole to instrument with (4) thumb screws.  
(Note: It may be necessary to lie the unit flat to install)
3. Insert T-pole with instrument attached into larger pole and pin at desired height.



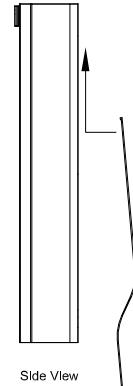


## Test Face Application

1. Place Test Face near top surface of CSV-1000 Instrument and attach to instrument as shown.
2. Insert the bottom section of the Test Face behind the bottom of frame.

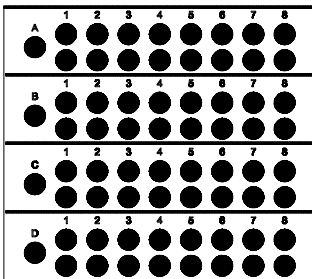


Front View



Side View

Test Face



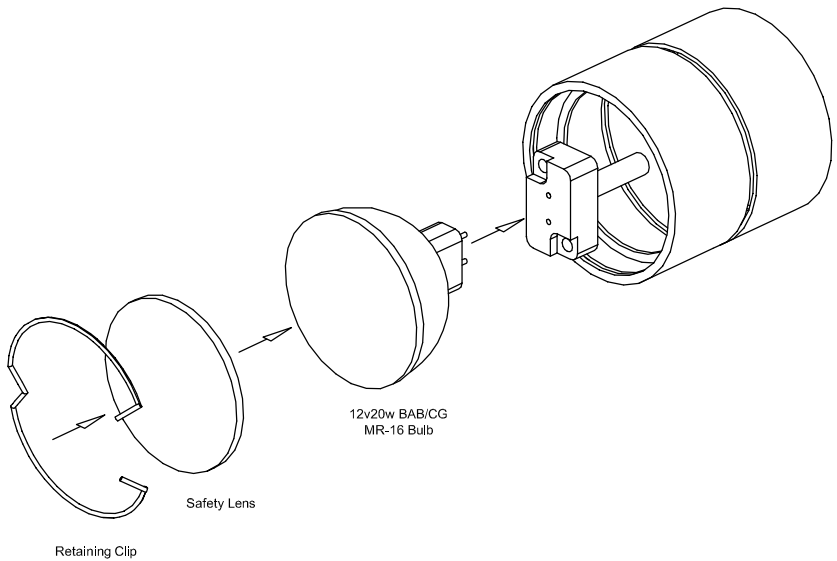
Test Face





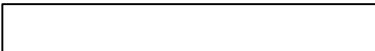
## Maintenance and Service

The glare source lamps generate considerable heat and should not be touched while the bulb is on or within 15 minutes after the bulbs have been turned off. When a glare source bulb burns out, it can be removed and replaced by the user. The user can replace the bulb by removing the retaining clip and safety lens, removing the expired bulb, placing in a new bulb, and replacing the safety lens and retaining clip.



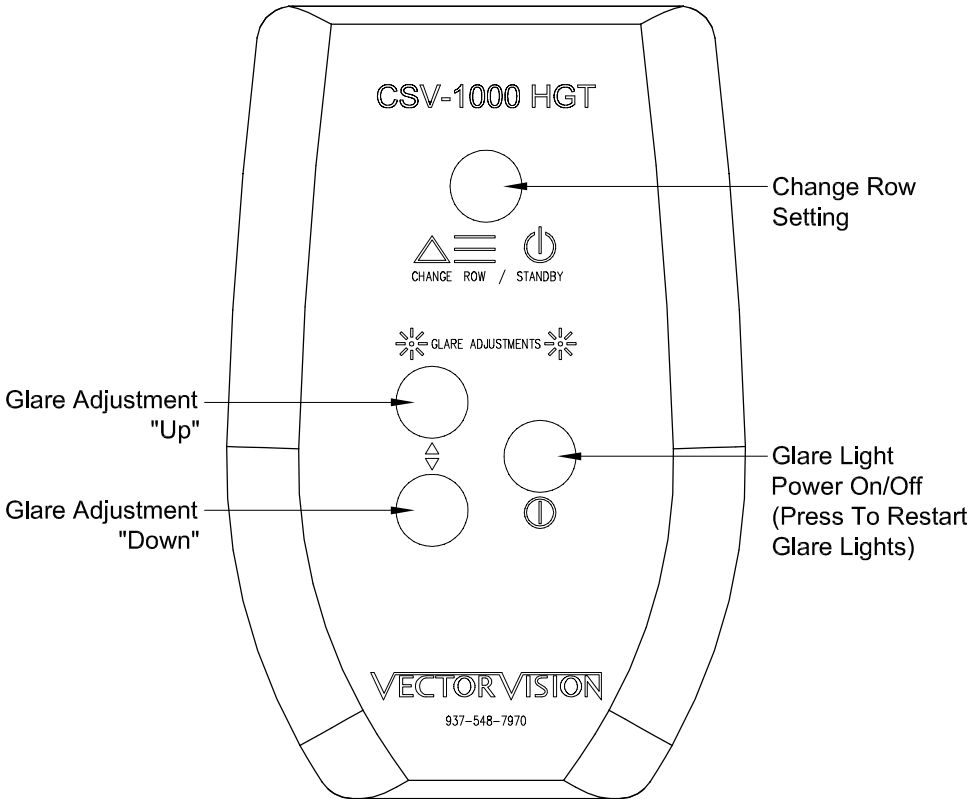
**NOTE:**

In order to control heat build-up, glare lights will automatically shut down within 60 seconds of being illuminated. To restart, press the Glare Source button on the remote control. See Page 9 for remote control functions.





## Remote Control Functions & Maintenance

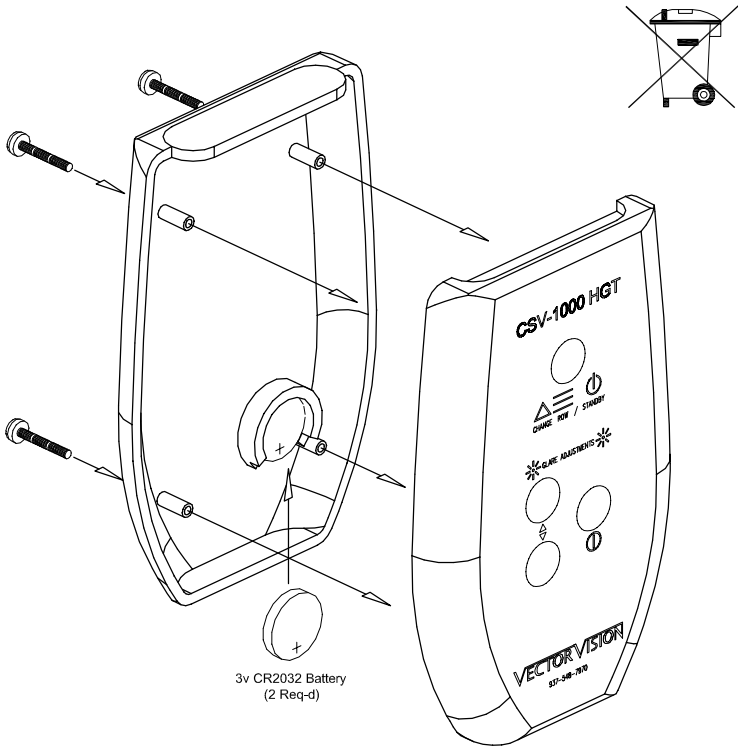




## Remote Control Functions & Maintenance (Continued)

The remote control is powered by (2) 3v CR2032 Batteries. When the battery power has been depleted, replace the batteries.

Batteries must be recycled in the United States. For further information about the United States recycling policy call 800-278-8599.



**Warning:** Keep remote control batteries away from small children and pets. If swallowed call a physician immediately. Do not incinerate the battery. When battery power is exhausted, dispose of the battery in accordance with applicable laws.



## Cleaning and Care

The exterior surfaces of the CSV-1000 instrument can be cleaned with any NON-ABRASIVE commercially available cleaner. Cleaning fluid or water should NEVER be sprayed directly on the instrument surface. The test face can be cleaned with water and a soft cloth only. They should not be rubbed with an abrasive cleaner or one that contains ammonia. As with other plastic surfaces the test faces are susceptible to damage from commercial solvents and the ultraviolet radiation in direct sunlight

## Disposal of Instrument

EU Users: At the end of the instrument life cycle, it must be sent to a WEEE recycling center.



## Important Tips & Storage

**WARNING:** Do not attempt to modify the CSV-10000 Instrument or create accessories not approved for use in conjunction with this instrument. Any such alterations or modifications could result in a hazardous condition and possible serious personal injury. The interior of the CSV-1000 has NO USER SERVICEABLE PARTS. Do not attempt in any way to destroy or disassemble the instrument or any of its components. Repairs requiring disassembly must be performed by VectorVision personnel. Unauthorized repairs or failure to abide by this warning may void the warranty.

### Storage

The CSV-1000 is constructed using miniature solid-state electrical components and miniature fluorescent bulbs. These components generate little heat and are designed for long-lasting performance with no maintenance. Proper storage and care of the instrument can help prolong its use. Store the CSV-1000 Instrument in a clean, dry space when not in use. Do not leave in direct sunlight. Avoid, where possible, exposure to extreme hot or cold temperatures. Always unplug the CSV-1000 when not in use.



## Warranty

VectorVision warrants this product for one year from date of purchase against any defects in material or workmanship under normal conditions as a vision testing instrument.

Parts not covered under this warranty: Test faces, except for manufacturing defects.

This warranty covers only normal use. Damage, defect, malfunctions that do not occur under normal use are excluded. Damage or any failure caused by disassembly or attempted repair by non-VectorVision personnel are not covered.

The warranty obligations of VectorVision shall be limited to repair or replacement of the instrument. VectorVision shall not be liable or responsible under any circumstances or in any amount for consequential or incidental damages, or injuries or damages to persons or property using or used in connection with the product or for loss of profits or other costs or expenses of any kind of character. There are no other warranties or representations by VectorVision other than as set forth herein, either expressed or implied and no person, firm or corporation is authorized to make any representation or incur any obligation in the name or on behalf of VectorVision except as stated herein.



## Electromagnetic Compatibility

This product is designed to meet the requirements of the following standards of EMC for electrical equipment for measurement, control and laboratory use:

EMC Directive: 89/336/EEC

- Generic Emissions Standard: EN 61000-6-3: 2001
- Product Specific Emissions: EN 55022 Class B
- Generic Immunity Standard: EN 61000-6-1: 2001
- Immunity: EN 61000-4-2 Electrostatic Discharge
- EN 61000-4-3 Radiated Susceptibility
- EN 61000-4-4 Electrical Fast Transient/Burst
- EN 61000-4-5 Surge
- EN 61000-4-6 Conducted Susceptibility
- EN 61000-4-11 Voltage Dips & Interruptions
- EN 61000-3-2 Harmonic Current
- EN 61000-3-3 Voltage Fluctuations & Flicker

## CE Compliance

This product meets the essential requirements of applicable European Directives, as amended for CE marking, as follows:

- 73/23/EEC; Low-Voltage Directive (safety)
- 89/336/EEC; Electromagnetic Compatibility Directive (EMC)

Refer to the Declaration of Conformity (DoC) for this product for additional information related to regulatory compliance. To obtain the DoC for the CSV-1000 Instrument please contact VectorVision.

MODEL NO. CSV-1000™  
Voltage: 100VAC - 240VAC, 47 - 63Hz  
Fuse: 1.5A  
Class 1

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## Legal Notices

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