

**INSTRUCTION  
AND  
MAINTENANCE MANUAL**

**OPTEC<sup>®</sup> 1000 DMV  
VISION TESTER**



**Stereo Optical Company, Inc.**

8600 W. Catalpa Ave., Suite 703, Chicago, IL 60656 USA

Phone: 1.773.867.0380 or 1.800.344.9500 Fax: 1.773.867.0388

Email: [Sales@StereoOptical.com](mailto:Sales@StereoOptical.com)

[www.StereoOptical.com](http://www.StereoOptical.com)

© Copyright 2017 Stereo Optical Company, Inc.  
Optec is a registered trademark of Stereo Optical Company, Inc.



# TABLE OF CONTENTS

I.	Vision Testing	1
II.	Operating the Control Panel of the OPTEC® 1000	1
III.	Administering the Tests	4
V.	Maintenance of the OPTEC® 1000 Vision Tester	5



# I. VISION TESTING

To be a skillful tester you must become familiar with the OPTEC® 1000 Vision Tester.

Look into the instrument and note what happens when the eye switches are ON and OFF. It is important to recognize whatever the subject may be describing and be able to answer any questions. Concentrate on acquiring a smooth delivery of instruction and description of the test target. The tester's expertise can help relax the subject, get better cooperation and a more accurate response.

When speaking to the subject, never act surprised or provoked by their responses or lack of response. Give the subject every opportunity to demonstrate their best vision.

If the subject is wearing glasses or contact lenses, they should wear them during the testing to determine whether they meet the requirements for corrected vision.

The table or counter should be of convenient height with surface space for the instrument. Normal room lighting is acceptable, but care should be taken to avoid light shining on the lenses or on the subject's face.

## II. OPERATING THE OPTEC® 1000

The first step is to connect the control panel to the instrument. Connect the multi-prong plug to the back of the control panel. The plug will fit in only one way. Push the plugs together and tighten the screw on each side of the plug. You should not have to unplug the control panel once you have joined the instrument and panel together.

Plug control panel into an electrical outlet by using the black cord with the three (3) prong plug. (110 V AC)

## CONTROL PANEL OPERATIONS

**CONTROL SWITCHES:** From left to right; (see figure #1)



Figure #1

### TOP ROW:

- First: **Right Eye Switch:** Orange color; when the switch is turned ON (depressed) the right eye will see the target, when the switch is turned OFF (raised) the right eye will see nothing.
- Second: **Left Eye Switch:** Green color; same as above. When both switches are ON together, the subject will see with both eyes (binocularly).
- Third: **Day/Night Control:** White color; when this switch is raised, daylight conditions are simulated in the instrument. When the switch is depressed, night-time conditions are simulated in the instrument.  
Most testing is done under day-light conditions.
- Fourth: **Power Switch:** Red color; this controls the power for the instrument. Depressed, the power is ON. Raised, the power is OFF.

Fifth **Ready Light:** Green color; this will light when the subject applies pressure to the headrest trigger and is in the proper position to be tested.

**MIDDLE ROW:** Perimeter Test

First: **Yellow Color:** 45° nasal perimeter test. When the switch is held down, a momentary light will flash in the face plate. The light will appear on the opposite side from the side you are testing.

Second: **Blue Color:** 55° temporal perimeter test

Third: **Blue Color:** 70° temporal perimeter test

Fourth: **Blue Color:** 85° temporal perimeter test

These switches are momentary. They will only flash as long as pressure is applied and will flash along the side you are testing. The same switches are used for testing both right and left sides. Turn the eye switch off for the eye not being tested.

**BOTTOM ROW:** Test Switches

First: **TEST #1:** White color; depress switch and test will be illuminated. Press again to turn illumination off when test is finished. Proceed to TEST #2.

Second, Third and Fourth: **TEST #2, #3 AND #4:** White color; same as above. If you are only doing one test, you can leave it on and the light will go off or on automatically as the subjects apply pressure to the headrest trigger.

### III. ADMINISTERING THE TEST

Turn the power on by depressing the **red** power switch. Depress the two eye switches--**orange** and **green**, being sure the **white** switch (day/night) is **NOT** depressed but in the raised position. Pull off the first headrest tissue so there is a clean tissue available for the subject.

Have a subject step forward and adjust the height of the instrument. Have the subject hold the instrument with both hands, one on each side, looking into the lenses. The subject's forehead should press against the headrest trigger. The **green** ready light on the control panel should light.

Depress the switch marked TEST #1 and administer the test. Check your score key for correct answers. Depress switch marked TEST #1 again so it will turn off. Proceed to switch marked TEST #2 for the next test. Continue this process until all testing is completed.

#### PERIMETER TESTING

Ask the subject to look straight ahead. Use the top line of the center column of an acuity test as a fixation point. Turn left eye off (switch raised). Press the switches in the middle row of the control panel in any sequence. Ask the subject to point to where they see a light flashing. Once you have gone through all four positions, turn the left eye on and the right eye off, following the same procedures.

#### IMPORTANT CHECKPOINTS:

- Be certain the instrument is plugged into a 110-120V AC outlet.



- Push RED power switch on control panel to activate the instrument.
- Check both eye switches to be certain they are depressed (ON).
- Tear off headrest tissue so a clean tissue is ready for the next subject.
- Be certain the subject presses their forehead against the headrest trigger so the illumination in the unit is activated and the GREEN "READY" indicator on the control panel is lit.
- Be certain you have a score key available.

## **IV. MAINTENANCE OF THE OPTEC<sup>®</sup> 1000 VISION TESTER**

Stereo Optical's OPTEC<sup>®</sup> 1000 Vision Tester was designed to minimize maintenance. It has been engineered and built for a lifetime of use. The only annual maintenance required is simple and does not necessitate a service call. There are no moving parts with the OPTEC<sup>®</sup> 1000.

The only components requiring occasional maintenance are:

- **EYEPiece LENSES:** The external sides of these lenses need to be cleaned occasionally (see figure #2). Care should be taken not to use any abrasive material on these lenses. Use the cleaner supplied with the vision tester. It is important to dry the lenses with a soft cotton cloth or tissue.
- **CLEANING OF SLIDE:** Open the slide cover door and remove the slide. Use a damp soft cloth or tissue with lens cleaner and wipe both sides of the slide.

- **EXTERIOR:** The aluminum and ABS plastic of which the instrument body is made can be cleaned with a damp cloth and a mild detergent. Make sure control panel is disconnected.
- **CHANGING LIGHT BULBS:** When you have a burned out bulb, identify which test is affected. Turn the power (RED switch) off. Unplug the instrument from the electrical outlet. Remove screws from top left and right rear of instrument. Take a firm grasp of the two knobs in the center of the back door and pull back and down (see figure #3). The door will open and the eight (8) light bulbs will be exposed (see figure #4). With two fingers slide the burned-out bulb and socket out. Replace the bulb with a blue coated bulb, (Optec® 2000-226). It is suggested that you replace the bulb opposite the burned out one at the same time. Slide the socket and bulb back into the track with the screw head on the socket top, on the outside of track. Close the door and replace the two screws. Turn power back on by plugging the cord into wall socket and depressing the red switch. You are now ready to continue testing.

Figure #2





**Figure #3**



**Figure #4**





**Stereo Optical Company, Inc.**

8600 W. Catalpa Ave., Suite 703, Chicago, IL 60656 USA

Phone: 1.773.867.0380 or 1.800.344.9500 Fax: 1.773.867.0388

Email: [Sales@StereoOptical.com](mailto:Sales@StereoOptical.com)

[www.StereoOptical.com](http://www.StereoOptical.com)

© Copyright 2017 Stereo Optical Company, Inc.

Optec is a registered trademark of Stereo Optical Company, Inc.