

INSTRUCTIONS
for the
RANDOT® PRESCHOOL STEREOACUITY TEST

The Randot Preschool Stereoacuity Test provides an easily administered quantitative test for children as young as 2 years of age. Its purpose is to measure how minutely the two eyes can discern differences in the distances of objects from the observer. Depth determinants such as size, overlapping perspective, etc. must be excluded to demonstrate the integrity of the fusion mechanism. Stereo Optical's Randot Preschool Stereoacuity Test is an ideal medium for this test. Without introducing instruments, corrective lenses or prisms the images for the right eye and left eye may be superposed and stereoscopic disparities introduced in graded steps. The range of stereopsis measured in this test is from 800 seconds of arc to 40 seconds of arc.

GENERAL

The test is composed of three (3) books. All subjects should be tested with the book labeled #1. Depending on the child's response to Book #1, the child should subsequently be tested with book #2 or #3. In each book, the left hand page shows two-dimensional black-and-white silhouettes of two sets of four test shapes. The right hand page contains two sets of four random dot patterns in different sequences than are on the left hand page. In each set of four Random Dot patterns, one contains no test shape while the others contain test shapes.

DISPARITIES

BOOK NUMBER	TEST POSITION	DISPARITY (Seconds of Arc)
1	TOP	200
1	BOTTOM	100
2	TOP	60
2	BOTTOM	40
3	TOP	800
3	BOTTOM	400

TEST PROTOCOL

The test subject places a pair of Stereo Optical Polarized Glasses in front of their eyes. At each disparity level, the subject must correctly identify at least two of the three tests shapes. Testing begins with Booklet #1. The subject confirms their ability to recognize each of the test shapes by pointing to the shapes on the left page of the booklet or naming each shape seen while pointing to the test target. If the subject responds correctly at the 200 arc second level (Top of Booklet 1#), proceed to the 100 arc second level (bottom of Booklet 2#). If correct responses are obtained at the 100 arc second level, testing proceeds in booklet #2 at the 60 and 40 arc second level. If correct responses are not obtained in booklet #1 proceed to booklet #3 at the 400 and 800 second level.

SCORING AND INTERPRETATION

If the child is unable to consistently identify most of the two-dimensional shapes on the left hand pages, the test is not scorable. Otherwise the smallest disparity at which the child is able to identify 2 of 3 test shapes is recorded as the stereoacuity. Normal children ages 3 to 5 years typically achieve stereoacuity of 60 or 40 seconds of arc.

ANSWER KEY

