

TECHNICAL MANUAL

Thank you for purchasing the Vision Assessment Corporation Random Dot 3s Stereo Acuity Test, P/N 1009s.



PURPOSE

This test uses a random dot pattern for testing extra fine stereo discrimination (depth perception) to rapidly test for amblyopia, strabismus and other binocular acuity problems in adults, early & non-readers and non-verbal children & adults.

Depth Perception: (n) *The ability to perceive spatial relationships, especially distances between objects, and three dimensions.*

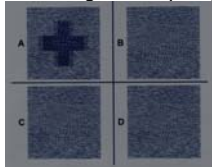
Geometric Shapes: *Triangle, Circle, Square & Plus*

- △ **Triangle**
- **Circle**
- **Square**
- ⊕ **Plus**

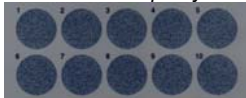
FAMILIARIZE YOURSELF WITH THE TEST

- Test consists of:
 1. 1 Booklet – 2 Vectographic Pages

- Page 1
4 levels of gross disparity



- Page 2 (Section A)
10 levels of disparity for critical testing



- Page 2 (Section B)
3 gross levels of disparity



2. 1 pair adult polarized viewers



3. 1 pair pediatric polarized viewers



4. Answer Key on back cover



TESTING CONDITIONS

- Well-lit, glare-free area
- If reflections or glare on the vectographic pages can be seen, try tilting the booklet or choose another testing location

ADMINISTERING THE TEST

- **Page 1**
 1. Place the polarized viewers on the test subject
 2. **PLEASE NOTE: IF TEST SUBJECT WEARS PRESCRIPTION GLASSES, THE POLARIZED VIEWERS SHOULD BE WORN OVER GLASSES**
 3. Before opening test booklet, familiarize test subject with the 4 Shapes on front cover (*Triangle, Circle, Square & Plus*)
 4. The test subject should be able to correctly identify at least 3 of the 4 non-stereo, two-dimensional Random Dot shapes on the front cover before administering the test
 5. Open test booklet and fold so that only Page 1 can be viewed by test subject
 6. Hold the test approximately 16 inches (40 cm) from the test subject
 7. Each Box A-D contains a floating Shape (*Triangle, Circle, Square or Plus*), each with decreasing levels of Stereopsis. The Shape in Box A also acts as floating Demonstration Target to help familiarize the test subject with the test
 8. Starting with Box A, ask the test subject to identify the Shape
 9. Repeat previous step for boxes B, C & D
 10. If test subject is unable to identify at least 1 Shape or is only able to correctly identify the Demonstration Shape in box A, turn to Page 2 and ask the test subject to identify the “L” & “R” in the center of the page. If the patient is unable to identify both the “L” & “R”, the patient is untestable

Scoring

1. Refer to Answer Key on back of test booklet
 2. Record the level of stereopsis for the last Shape correctly identified
- **Page 2, Section A (For Adults)**
 1. Turn booklet so that only page 2 can be viewed by test subject
 2. Ask test subject to look at the 10 Circle targets each containing 4 smaller Circles

3. Only one Circle in each target will appear to be floating forward, and the other 3 Circles will appear to be recessed or floating backwards
4. Starting with Circle #1, ask the test subject to point to or identify (top, bottom, left or right) the Circle that appears to be floating forward or different from the others
5. Repeat last step for Circles 2-10
6. When one is target is identified incorrectly, retest the preceding target to ensure that the test subject can achieve this level and was not just guessing

Scoring

1. Refer to Answer Key on back of test booklet
2. Record the level of stereopsis for the last target in which the test subject correctly identified the floating Circle

• **Section B (For Children)**

1. Each Row A, B & C consists of 4 boxes each containing a Shape that floats forward
2. The Shapes in each Row are set at the same level of stereopsis with Row A at 400 seconds, Row B at 200 seconds & Row C at 100 seconds of arc
3. Starting with Row A, ask the test subject to identify the Shape in each box (*Triangle, Circle, Square or Plus*)
4. Repeat previous step for Rows B & C

Scoring

1. Refer to Answer Key on back of test booklet
2. The test subject must correctly identify 3 of the 4 Shapes in a given Row to achieve that level of stereopsis
3. Record the level of stereopsis of the last Row for which the test subject correctly identified at least 3 of the 4 Shapes

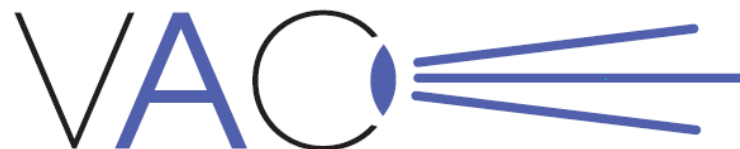
SCORE KEY	Seconds of arc 16 in., (40 cm)	Shepard Percentage	Verhoff Distance
A	400	15%	0.1
B	200	30%	0.2
C	100	50%	0.3

CARE/HANDLING & STORAGE

- Clean vectographic pages with a soft, damp lint-free cloth
- ☀️☔ Store closed booklet in a cool, dry place away from direct sunlight
- Clean polarized viewers using lens cleaner and soft, lint free cloth

WARRANTY

- 1 year manufacturer warranty from date of purchase



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Assessment
Corporation

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