

## PATIENT INSTRUCTIONS

Thank you for purchasing the Vision Assessment Corporation Pool Balls Polarized Variable Vectograph (P/N 1048).



### PURPOSE

A three-dimensional picture is used to strengthen the binocularity system and provide base-in and/or base-out training.

### FAMILIARIZE YOURSELF WITH THE VECTOGRAPH

- Polarized Variable Vectograph Vision Therapy System consists of:

1. 1 Therapy Binder



2. 1 Guide



3. 2 Vectographic Panels

- Panel 1 (Blue Bar at Bottom)



- Panel 2 (Numbers/Letters at Bottom)



4. 1 Pair Standard Polarized Viewers



(NOT TO BE USED AS SUNGLASSES)

5. 2 Instruction Manuals

- Doctor Instruction Manual
- Patient Instruction Manual

*This exercise works best if practiced daily as suggested. A Patient Instruction Manual has been included so the Vectograph Vision Therapy System can be sent home with the patient to allow for greater success through continued at-home usage and practice.*

6. 1 Patient Vision Therapy Record Form with Pen

### TESTING CONDITIONS

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

### ADMINISTRATION

1. Place the polarized viewers on the patient.

**PLEASE NOTE:** DOCTOR SHOULD ADVISE WHETHER OR NOT POLARIZED VIEWERS SHOULD BE WORN OVER PATIENT'S PRESCRIPTION GLASSES.

2. Hold the Vectograph approximately 16 inches (40 cm) in front of the patient.
3. Slide the 2 panels in the guide until the 0 appears in the opening on the blue bar at the bottom of the test.
4. Begin by performing a suppression check. Ask the patient to look at Pool Table image and the Pool Balls by both the Left and Right Pockets of the table. Ask the patient to point to or identify by the number of each the Solid Ball by the Left Pocket, #7, and the Striped Ball by the Right Pocket, #11. They should be able to see/identify both the Solid Ball #7 and the Striped Ball #11 before proceeding with this exercise.
  - If the patient does not point to/identify the Solid Ball #7 by the left pocket, the patient is suppressing vision in his/her left eye. Instruct the patient to cover their right eye. Have the patient focus with their left eye until he/she is able to see Solid Ball #7 that was not seen when viewing the Vectograph binocularly. Then again have the patient view the Vectograph binocularly to ensure that the Solid Ball #7 can be seen.
  - If the patient does not point to/identify Striped Ball #11 by the Right Pocket, the patient is suppressing vision in their right eye. Instruct the patient to cover their left eye. Have the patient focus with their right eye until he/she is able to see the Striped Ball #11 that was not seen when viewing the Vectograph binocularly. Then again have the patient view the Vectograph binocularly to ensure that the Striped Ball #11 can be seen.
5. Each of the Balls within the Vectograph are arranged at different levels of depth with varying seconds of arc. Ask the patient to point to each Ball and indicate if the Ball appears to be floating away from them (BELOW the Vectograph), towards them (ABOVE the Vectograph) or if it does not appear to float (EVEN) with the Vectograph.
6. Refer to the "Answer Key" section of this manual for the seconds of arc and direction and depth of float for each of the Balls. Ask the patient to compare various Balls and indicate which Ball is closer and which is further away.
7. Next, while slowly sliding the panels apart ask the patient to try to maintain a single image while repeating Steps 5 & 6.
8. Have the patient indicate when the images double or when he/she is no longer able to fuse the Ball images. (This is the Breaking Point.)
9. Note the number/letter in the space on the blue bar at the bottom of the Vectograph. Refer to "Scoring" section of this manual.
10. Next, as you slowly slide the panels back together, ask the patient to indicate when he/she is able to see the doubled images as a single clear image again. (This is the Recovery Point.)
11. Note the number/letter in the in the space on the blue bar at the bottom of the Vectograph. Refer to "Scoring" section of this manual.
12. Repeat steps 5 – 11 until patient can achieve the doctor's recommended goal.
13. Follow any variation on these exercises as recommended by the doctor.

### SCORING

- Each letter A-P on the bottom blue bar represents one diopter (Base-In) (Divergence / Relaxing).
- Each number 1-10 on the bottom blue bar represents one diopter. (Base-Out) (Convergence / Crossing).
- Each number 10-24 represents two diopters. (Base-Out) (Convergence / Crossing).

- 40 diopter range of separation available.
- Refer to the Patient Vision Therapy Record Form and record the date
- Above the diagonal line in the row labeled “Relaxing” record the Breaking Point for the highest letter on the blue bar that the patient is able to reach.
- In the same box, below the diagonal line, record the Recovery Point for the highest letter from the blue bar at which the patient is able to fuse the images as a single clear image again.
- Repeat the previous 2 steps for the row labeled “Crossing” and record the Breaking Point and Recovery Point for the highest number that the patient can reach on the blue bar at the bottom of the Vectograph.

**ANSWER KEY**



Depth Levels (Seconds of Arc) / Image Orientation to Vectograph:  
(Clockwise Left to Right) Total Stereopsis Depth: 7,350”

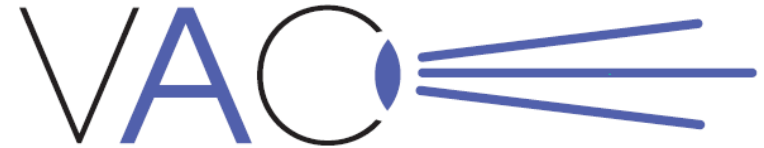
- |   |   |
|---|---|
| # 7 (Solid Ball Lt. Pocket): Left Suppression | # 11 (Striped Ball Rt. Pocket): Right Suppression |
| #12: 2000” / ABOVE                            | Back Rail: 5350” / BELOW                          |
| #9: 500” / ABOVE                              | Cue Ball (White Ball): 3000” / BELOW              |
| #3: 250” / ABOVE                              | Eight Ball (#8): 2000” / BELOW                    |
| #5: 0” / EVEN                                 | #14: 750” / BELOW                                 |
| #15: 250” / BELOW                             | #4: 500” / BELOW                                  |
| #2: 1000” / BELOW                             | #10: 100” / ABOVE                                 |
| #13: 4000” / BELOW                            | #1: 1000” / ABOVE                                 |

**CARE/HANDLING & STORAGE**

- Clean vectographic panels and guide with a soft, damp, lint-free cloth. Dampen cloth using glass cleaner or mild detergent/water.
- **CAUTION: DO NOT IMMERSE THE VECTOGRAPHIC PANELS IN WATER. DO NOT SPRAY CLEANER DIRECTLY ONTO PANELS.**
- ☀️ ☔ Store Vectograph in a dry place away from direct sunlight.
- Clean polarized viewers using lens cleaner and soft, lint-free cloth.
- If panels are removed from guide during cleaning, replace the panels in the guide, placing the panel with the blue bar on top of the panel with the numbers/letters. and ensuring that the plastic portion of the guide is behind the panels.

**WARRANTY**

- 1-year manufacturer warranty from date of purchase



Vision  
**Assessment**  
Corporation

Pool Balls

Polarized Variable Vectograph

**P/N 1048**

**PATIENT INSTRUCTIONS**

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