

Vision  
**Assessment**  
Corporation

***Gem PL***

***Polarized Variable Vectograph***

P/N 1060PL

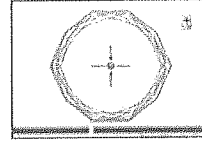
**DOCTOR INSTRUCTIONS**

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## DOCTOR INSTRUCTIONS

Thank you for purchasing the Vision Assessment Corporation Gem PL Polarized Variable Vectograph Vision Therapy System with Fixation Disparity Target and Fusion Lock, P/N 1060PL.



### 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 it or choose another testing location.

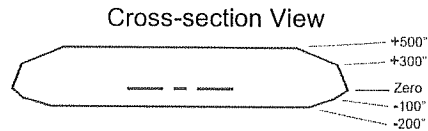
## **ADMINISTRATION**

1. Place the polarized viewers on the patient.
2. **PLEASE NOTE: DOCTOR SHOULD ADVISE WHETHER OR NOT POLARIZED VIEWERS SHOULD BE WORN OVER PATIENT'S PRESCRIPTION GLASSES.**
3. Hold the Vectograph approximately 16 inches (40 cm) in front of the patient.
4. Slide the 2 panels in the guide until the 0 appears in the opening on the blue bar at the bottom of the test.
5. Now ask the patient to look at the box containing the + located in the upper right-hand side of the Vectograph.
6. The patient should be able to see both the L & R (Left & Right) below the +. If the patient is unable to see both letters, instruct him/her to cover the opposite eye for the side he/she cannot see. For example, if the patient cannot see the R (Right), have him/her cover his/her left eye. Have the patient focus with the one eye until he/she is able to see the letter that was not previously seen when viewing the Vectograph binocularly. Then again have the patient view the Vectograph binocularly to ensure that now he/she can see both the L & R. Once both the L & R can be seen, the patient is ready to use the Vectograph.
7. Slowly slide the panels apart and ask the patient to try to maintain a single Gem image while also trying to keep the Fixation Disparity Target and **E** in the center of the Gem image as single clear images. *As the panels are separated and the blue bar moves along the letters from A to P, the Gem image and targets should get larger and float behind the Vectograph (divergence). As the panels are separated and the blue bar moves along the numbers from 1 – 24, the Gem image and targets should get smaller and float in front of the Vectograph (convergence).*
8. Have the patient notify you when he/she is no longer able to fuse the Gem image, the Fixation Disparity Target or the **E**. (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 notify you when he/she is able to see the Gem image as well as both the Fixation Disparity Target and **E** in the center of the Gem as single clear images 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 7 – 11 until patient can achieve the doctor's recommended goal.

## **SCORING**

- Each letter 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.
- 5 layers in the Vectograph have a range of 700 sec of arc.



- Refer to the Patient Vision Therapy Record Form.
- Record the date.
- Above the diagonal line in the row labeled "Relaxing" record the Breaking Point for the highest letter that the patient is able to reach.
- In the same row below the diagonal line record the Recovery Point for the highest letter at which the patient is able to fuse the images as single clear images again.
- Repeat the previous 2 steps for the row labeled "Crossing" for recording the Breaking Point and Recovery Point for the highest numbers that the patient can reach on the blue bar at the bottom of the Vectograph.

#### CARE/HANDLING & STORAGE

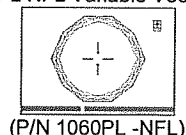
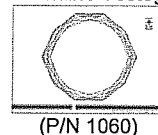
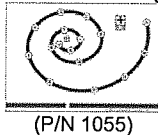
- Clean vectographic panels and guide with a soft, damp, lint-free cloth. Dampen cloth using glass cleaner or mild detergent/water.
- **CAUTION: DO NOT IMMERSE THE VECTOGRAPHIC PANELS IN WATER. DO NOT SPRAY CLEANER DIRECTLY ONTO PANELS.**
- Store Vectograph in a dry place away from direct sunlight.
- 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.

#### ALSO AVAILABLE

Vortex Variable Vectograph - Gem Variable Vectograph - Gem PL NFL Variable Vectograph



Vision Assessment Corporation would like to express its appreciation to Dr. Paul Lederer, FCOVD for his help in the design and development of this exercise. Dr. Paul Lederer, FCOVD has no financial interest in the Gem PL Polarized Variable Vectograph, P/N 1060PL.



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