

## INSTRUCTIONS

Thank you for purchasing the Vision Assessment Corporation Large Fixation Disparity Polarized Target, P/N 1071PL-LFD.



### PURPOSE

Vectographic two-dimensional Fixation Disparity Crosses at 20/95 and 20/100 acuity levels for assessing Near Point of Fixation Disparity and Associated Vergence Measures at Near.

### FAMILIARIZE YOURSELF WITH THE TEST

#### • Test Includes:

1. 1 Near Large Fixation Disparity Target



2. 1 Pair Standard Polarized Viewers



(NOT TO BE USED AS SUNGLASSES)

3. Instruction Manual

### TESTING CONDITIONS

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

### ADMINISTRATION

#### **A. NEAR POINT OF FIXATION DISPARITY (NPDF)**

The Near Point of Fixation Disparity (NPDF) is classically performed in free space. It is administered in the same way as the Near Point of Convergence (NPC); however, the break point of the NPC is double vision, while the break point of the Near Point of Fixation Disparity (NPDF) is the distance at which a Fixation Disparity is present and which cannot be resolved within a 1-2 second time period.

1. Place the Polarized Viewers on the patient.

**PLEASE NOTE:** Doctor should decide whether or not Polarized Viewers should be worn over patient's prescription glasses.

2. The Large Fixation Disparity Target (LFD) which has 2 fixation disparity crosses positioned vertical to one another. The top target is the original fixation disparity cross (20/95) used in the paper

"Confusion Inside Panum's Area" (See *Binocular Vision Dysfunction Diagnostic & Treatment System, P/N 1070-PL on last page of this manual*), and the large fixation disparity cross on the bottom is set at 20/100. The use of these vertically displaced fixation disparity crosses facilitates the comparison of binocular performance when using a lower versus higher spatial frequency or acuity demand.

3. Hold the LFD Target at approximately 50 inches (127cm) in front of the patient. **PLEASE NOTE:** A further distance may be required if the arrows are sliding at 50" (127cm) and beyond.
4. Have the patient look at both the top and bottom crosses. Start slowly moving the LFD Target toward the patient while asking the patient to try to maintain the Fusion Lock **Es** as clear.
5. Ask the patient to indicate when either top or bottom cross' arrows *first* begin to slide or slip and/or the **Es** begin to blur or become unclear. Note the distance at which they cannot be realigned in the time it takes to ask him/her "Are they still sliding?" This duration is approximately 1-2 seconds. Record this distance as his/her Break Point.
6. The NPDF recovery is determined by gradually moving the LFD Target away from the patient until the patient indicates that the arrows have realigned and the **Es** are clear. These findings constitute the Break and Recovery Points of the NPDF and are recorded by distance.

#### **B. ASSOCIATED VERGENCE MEASURES**

1. Use the LFD Target for Associated Vergence Testing at near (16"-18") (41cm-46cm). This testing is typically done with a Risley prism in free space; however, it can also be done behind the refractor with bilateral Risley prisms. Convergence or divergence prism demand is gradually increased. The divergence prism demand is classically administered before convergence demand. The prism demand that exceeds the ability for binocular function to compensate manifests as a Fixation Disparity that cannot be resolved within 1-2 seconds or the time it takes to ask the patient "Are they still sliding?" Record this Break Point in prism diopters.
2. During this testing it is important to ask the patient to attend to the clarity of the **E** Fusion Lock. This testing also allows the patient to compare his/her performance on one target versus the other without engaging a horizontal saccadic eye movement.

#### **CARE/HANDLING & STORAGE**

- Clean LFD Target with a soft, damp, lint-free cloth. Dampen cloth using glass cleaner or mild detergent/water.
- **CAUTION: DO NOT IMMERSE THE NEAR FIXATION DISPARITY TARGET IN WATER. DO NOT SPRAY CLEANER DIRECTLY ONTO TARGET.**
- ☀ ☂ Store LFD Target in a dry place away from direct sunlight.
- Clean Polarized Viewers using lens cleaner and soft, lint-free cloth.

#### **WARRANTY**

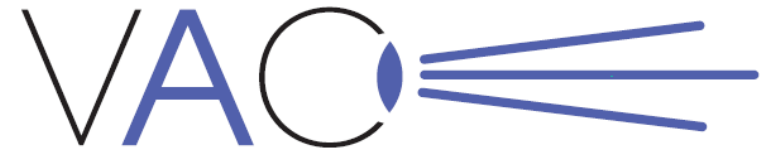
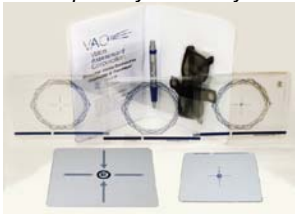
- 1 year manufacturer warranty from date of purchase.

## **RELATED PRODUCTS**

- **BASS-PL, Binocular Accommodative Saccadic Series** (P/N 1075-PL)  
A highly sensitive measure of the relationship between Binocular alignment (fixation disparity) and Accommodative function (clarity) during a Series (stamina) of cognitively loaded Saccadic eye movement. This series is designed to be a more dynamic measure of binocular/accommodative function during a saccadic eye movement task using a sequence of saccadic identification targets at two different acuity levels (20/100 & 20/63).  
*Sold as complete system or system components also sold individually.*



- **Binocular Vision Dysfunction Diagnostic & Treatment System** (P/N 1070PL)  
The diagnostic Fixation Disparity Targets included in this system can be administered in free space or behind a refractor and presented at a variety of working distances and directions of gaze. These targets, while easy to administer and simple for the patient to understand, are sensitive to suppression and measure vertical and horizontal binocular function. The hierarchal system of Vectographs included in this system can then be used to aid effective treatment of binocular vision disorders.  
*Sold as complete system or system components also sold individually.*



Vision  
**Assessment**  
Corporation

*Large Fixation Disparity*

*Polarized Target*

**P/N 1071PL-LFD**  
**INSTRUCTIONS**

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Vision Assessment Corporation would like to express its appreciation to Dr. Paul Lederer, OD, FCOVD, FAAO for his help in the design and development of this target. Dr. Paul Lederer, OD, FCOVD, FAAO has no financial interest in the Large Fixation Disparity Polarized Target, P/N 1071PL-LFD, nor Vision Assessment Corporation nor any of its products.



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