

## INSTRUCTIONS

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



### PURPOSE

Vectographic two-dimensional Fixation Disparity Crosses at 20/95 and 20/63 acuity levels for assessing Near Point of Fixation Disparity and Associated Vergence Measures at Near.

### FAMILIARIZE YOURSELF WITH THE VECTOGRAPH

- Test includes:

1. 1 Near Small 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 (NPF)

The Near Point of Fixation Disparity (NPF) 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 (NPF) 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 Small Fixation Disparity Target (SFD) 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 small fixation disparity cross on the bottom is set at 20/63. 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 SFD 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 SFD 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 NPF recovery is determined by gradually moving the SFD 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 NPF and are recorded by distance.

### B. ASSOCIATED VERGENCE MEASURES

1. Use the SFD 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 SFD 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 SFD 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.

**Notice to User/Patient:** *Any serious incident that has occurred in relation to this device should be reported to the manufacturer and to the competent authority of the Member State in which the user and/or patient is established.*



## ***Small Fixation Disparity Polarized Target***

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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 Small Fixation Disparity Polarized Target, P/N 1071PL-SFD, nor Vision Assessment Corporation nor any of its products.



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