## INSTRUCTIONS

Thank you for purchasing the Vision Assessment Corporation Near Fixation Disparity, P/N 1065-NFD.



#### PURPOSE

A vectographic two-dimensional Fixation Disparity Target for assessing Near Point of Fixation Disparity and Associated Vergence Measures at Near.

# FAMILIARIZE YOURSELF WITH THE TEST

- Test consists of:
  - 1. 1 Near Fixation Disparity Target



2. 1 Pair Standard Polarized Viewers

(NOT TO BE USED AS SUNGLASSES)

3. 1 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 (NPFD)

The Near Point of Fixation Disparity (NPFD) 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 (NPFD) 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. Start the NPFD by holding the Near Fixation Disparity (NFD) 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. The Far Fixation Disparity (FFD)\* Target can then be used to determine if an unresolved Fixation Disparity is present at all distances (\*Also available).

3. Start slowly moving the NFD Target toward the patient while asking the patient to try to maintain the Fusion Lock **E** as clear.

*PLEASE NOTE:* If the patient experiences suppression, adding movement by shaking the NFD Target tends to break suppression.

- 4. Ask the patient to identify when the arrows *first* begin to slide or slip. 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.
- The NPFD recovery is determined by gradually moving the NFD Target away from the patient until the patient indicates that the arrows have realigned and the E is clear. These findings constitute the Break and Recovery Points of the NPFD and are recorded by distance.

# **B. ASSOCIATED VERGENCE MEASURES AT NEAR**

Associated Vergence Measures are done at near (16<sup>°</sup>-18<sup>°</sup>) (41cm-46cm) with the NFD Target. 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.

- 1. Gradually increase convergence or divergence prism demand. 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.

*PLEASE NOTE:* If the patient experiences suppression, adding movement by shaking the NFD Target tends to break suppression.

3. Once this Break Point has been reached, add another 5pd of demand. Then gradually decrease the demand until alignment of the arrows and clarity of the **E** has been obtained. Record this Recovery Point in prism diopters.

*PLEASE NOTE:* The time it takes to recover alignment, for a given prism demand, can be thought of as the patient's prism adaption time.

## **CARE/HANDLING & STORAGE**

- Clean Near Fixation Disparity 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.
- The store NFD 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.

#### ALSO AVAILABLE

### • Far Fixation Disparity

Vectographic two-dimensional Fixation Disparity Target for assessing Far Point of Fixation Disparity and Associated Vergence Measures at Far.



#### **RELATED PRODUCTS**

• **Binocular Vision Dysfunction Diagnostic & Treatment System** System includes Near & Far Fixation Disparity Targets for diagnosing Fixation Disparities & 3 hierarchal Polarized Variable Vectographs: Gem, Gem-PL (with Fixation Disparity Target & Fusion Lock), & Gem PL-NFL (with Fixation Disparity Target & No Fusion Lock) to aid effective treatment of Binocular Vision Disorders.



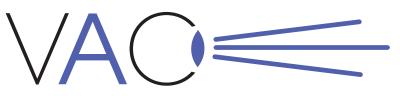
(P/N 1070-PL)

Variable Fixation Dispartiy Polarized Variable Vectograph: Vectograph utilized to assure that the concepts of the Binocular Vision Dysfunction Diagnostic & Treatment System, P/N 1070-PL, have been truly learned and can be applied. This Vectograph no longer has the peripheral three-dimensional float, provided by the GEM, to cue the patient where to look to help align the convergence or divergence demand on the cross.



**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.

Vision Assessment Corporation would like to express its appreciation to Dr. Paul Lederer, O.D., F.C.O.V.D., F.A.A.O. for his help in the design and development of this test. Dr. Paul Lederer, O.D., F.C.O.V.D., F.A.A.O. has no financial interest in the Near Fixation Disparity Target, P/N 1065-NFD, nor Vision Assessment Corporation nor any of its products.



Vision Assessment Corporation ™

# **Near Fixation Disparity**

P/N 1065-NFD INSTRUCTIONS

Vision Assessment Corporation 5400 Newport Drive, Suite 3 Rolling Meadows, Illinois 60008 USA Phone: 1 847 239 5889 Email: sales@VisionAssessment.com Web: www.VisionAssessment.com



MDSS GmbH, Schiffgraben 41, Hannover 30175, Germany

Manufactured in USA by Vision Assessment Corporation © 2009