

Item #11311 (Bishop Prism Set) Instructions

Introduction: The Bishop Prism Set was developed because prismatic measurement of large-angle strabismus requires the simultaneous use of two or more prisms for neutralization.

Mechanical difficulties can arise when trying to simultaneously hold separate prisms in front of each eye in the frontal position. Proper positioning may be difficult in patients with a large interpupillary distance (especially in patients with exotropia, where the effective interpupillary distance at the prism plane is increased), for examiners with small hands, or when it is also necessary to combine a vertical prism with the two horizontal prisms.

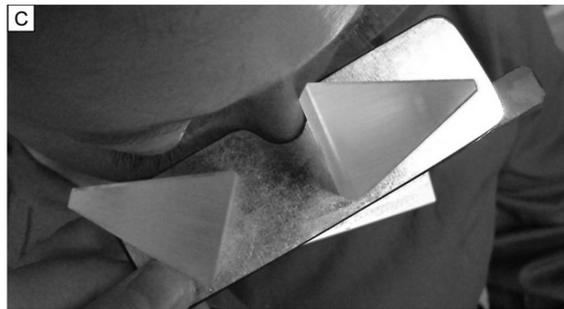
Inadvertent rotation of one or both prisms about the vertical axis (the Z axis of Fick) induces a corresponding change in the effective horizontal prism power, while inadvertent rotation of one or both prisms about the horizontal axis in the sagittal plane (the Y axis of Fick) can induce a vertical prismatic error.

Normal Use: This magnetic prism system allows two horizontal prisms to be simultaneously positioned properly with one prism in front of each eye held securely in place on the metal plate by magnetic attraction.

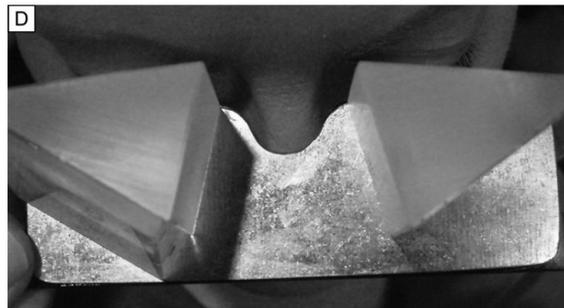
The prisms can be spaced for the patient's interpupillary distance and can be adjusted to keep each in the frontal plane position for distance measurements (Figure A) or nasally rotated for near measurements (Figure B).



The prisms can be freely rotated on the plate to keep the posterior prism surface in the frontal plane when measuring deviations in right or left gaze (Figure C).



Each prism is held level by the plate avoiding induced vertical prism. When necessary, an additional prism with power up to 20Δ containing a magnet in the base can be positioned base down in front of either horizontal prism to neutralize combined horizontal and vertical deviations (see Figure D).



Cleaning Instructions: Clean prisms with mild soap and water. NEVER USE ALCOHOL. Dry plate immediately with paper towel.

Reference: Bishop, John Edward. 'Magnetic Prism Alignment System For Measuring Large-Angle Strabismus'. Journal of American Association for Pediatric Ophthalmology and Strabismus 18.1 (2014): 101-102.