# Company Seven

## **Astro-Optics Division**



## UNITRON UNIHEX INSTRUCTION MANUAL

by Unitron. 72 dpi Scan by Company Seven

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## Instructions

## UNITRON

UNIHEX EYEPIECE HOLDER, Models A and B and SUPER UNIHEX

INTRODUCTION: The UNIHEX is a multiple eyepiece holder which contains a 90° prism to permit comfortable viewing at all angles of elevation. In addition, it holds six eyepieces simultaneously which permits rapid changes of magnification by simply rotating the turret. This eliminates the inconvenience and possible damage to eyepieces resulting from the use of conventional eyepiece holders which permit using only single eyepieces.

Model A: For use with UNITRON Refractors. This model has eyepiece holders for five 24.5mm eyepieces and one 1-1/4" eyepiece. The 1-1/4" eyepiece holder is provided to accommodate the UNITRON 40mm low powered widefield eyepiece.

The Model A has a drawtube of 36.2mm O.D.

Model B: Is offered for use with all instruments equirped with a 1-1/4" (32.0mm) drawtube receptacle. The turret is equipped with six 1-1/4" eyepiece holders.

Super Unihex: Must be used in combination with the UNITRON Super Rack and Pinion mechanism because of extra large drawtube diameter (71mm O.D.). Eyepiece holders consist of 1 – 58mm O.D. holder for UNITRON 60mm eyepiece, and 1 – 1–1/4" holder and 5 – 24.5mm eyepiece holders.

ASSEMBLY (The following is applicable to both models) Refer to Fig. 1.

- 1) Screw the threaded end of the chromium drawtube (1) into the turret (2) of the UNIHEX.
- 2) Remove the regular drawtube supplied with the telescope by sliding it out of the rack and pinion.
- 3) Insert the UNIHEX drawtube (1) into the rack and pinion sleeve in place of the regular drawtube.

#### II OPERATION

- 1) Eyepiece holders are of various lengths (See Fig. I! (1)). The eyepieces should be arranged in the holder in order of focal length with the longest focal length eyepiece in the longest holder. This arrangement will require the minimum focus adjustment when changing powers.
- 2) The index arrow (2) indicates the position of the prism. The eyepiece holder in line with the index arrow is the one which is in position for viewing. The entire UNIHEX may be rotated in the rack and pinion, repositioning the prism if viewing from either side of the telescope is more comfortable.
- 3) Focus initially by sliding the entire UNIHEX in or out of the rack and pinion sleeve, using a low power eyepiece. When an approximate focus has been obtained, slide the clamp (Fig. 1 (3)) over the rack and pinion sleeve and tighten the wing nut. This will prevent the UNIHEX from sliding out of the instrument and will retain the coarse focus position. Refine the focus by using the rack and pinion mechanism.
- 4) To change powers, rotate the turret in a clockwise direction so that the desired eyepiece is in line with the index arrow (2). Clickstops are provided at each of the six positions, assuring positive alignment of the selected eyepiece with the prism. If the eyepieces have been arranged by focal length, only a minor adjustment of the rack and pinion should be required to bring each eyepiece into sharp focus.

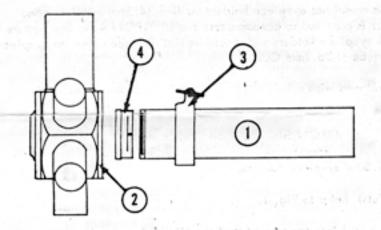
III ACHROMATIC AMPLIFIER - The achromatic amplifier is a two-element, Barlow-type negative amplifying lens. Its purpose is to double the magnification of any eyepiece with which it is used. It is standard equipment with any Model A UNIHEX supplied as a part of an instrument. If the UNIHEX has been purchased as a separate accessory, then the amplifier may be obtained for \$6.00, postpaid.

The achromatic amplifier is not available for the Model B or Super UNIHEX eyepiece holders.

The amplifier (Fig. 1 (4)) is located in the threaded end of the drawtube of the Model A, and can be removed by a "pulling-twisting" motion. When inserted in the tube, it will double the magnification of all eyepieces in the UNIHEX.

IV WARRAIT AITO SERVICE - All DITIROTT Reliacions did Accessories die 1011) gostaniese ship and performance. Should any component be found faulty as the result of manufacturing defect, replacement will be made without charge.

If at any time, your UNIHEX requires servicing return it to the UNITRON Instrument Company at the address shown below, marked to the attention of the Instrument Service Department. Be sure to include a note indicating the difficulty and providing complete return address.



- Drawtube
- 2. Turret
- Drawtube Clamp
- 4. Achromatic Amplifier (Model A only)

FIGURE II

- 1. Eyepiece Holders
- 2. Index Arrow

