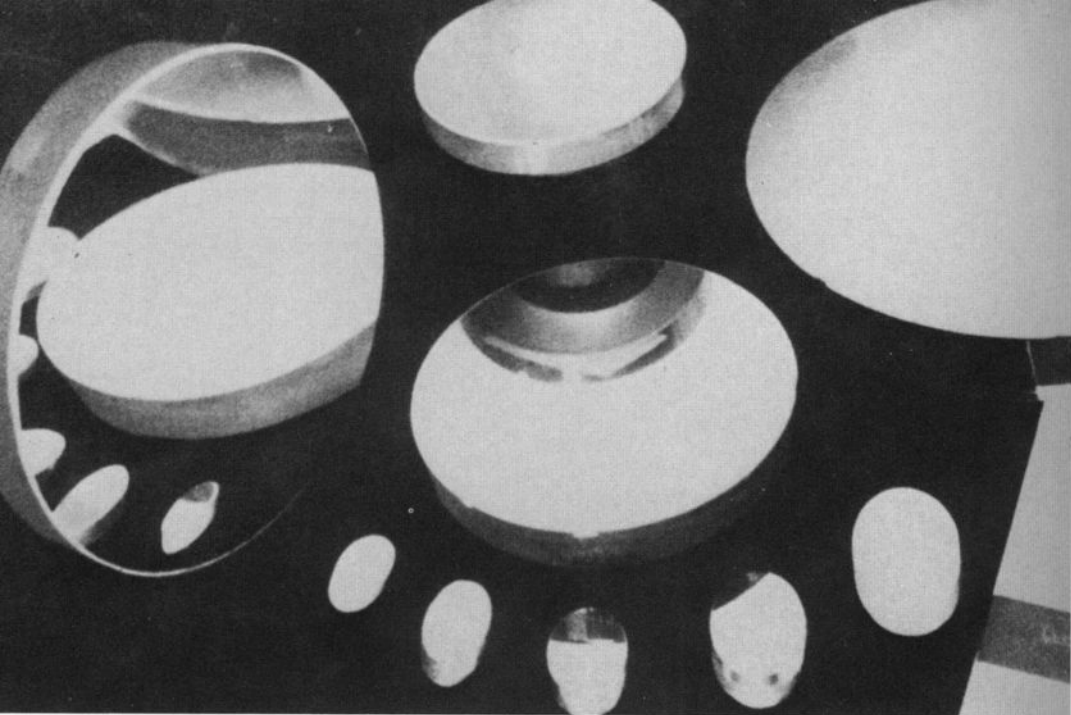
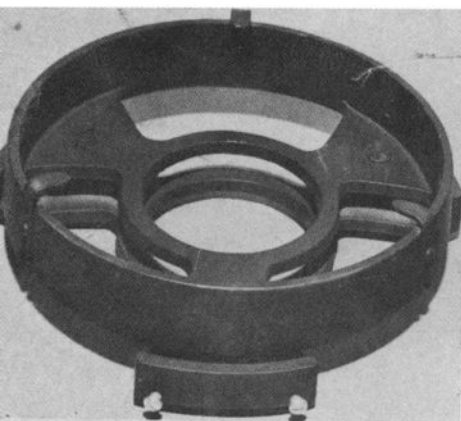


CAVE *Astrala* Telescope Components and Accessories

CAVE OPTICAL CO.
4137 E. ANAHEIM ST., LONG BEACH, CALIFORNIA 90804
TELEPHONE (AREA CODE 213) 434-2613

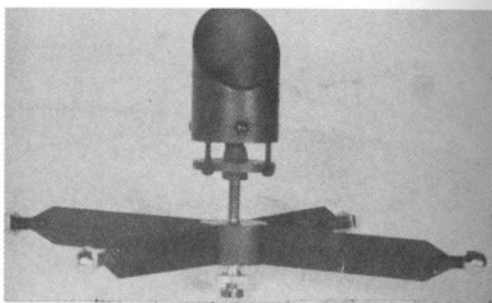
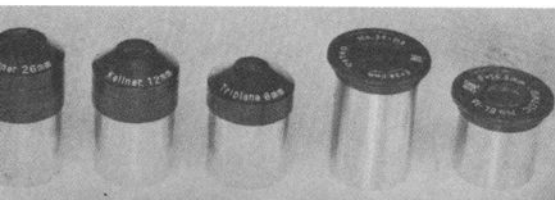


Cave Astrola Telescope Mirror: these mirrors have made Cave Optical famous for more than 1/4 of a Century for their exquisite, ultimate definition and performance. Each mirror is made of PYREX, super fine annealed with enhanced extreme high reflecting aluminizing. Each mirror is accompanied with a matching diagonal of equal fine quality. The diagonal and mirror are available separately if desired.



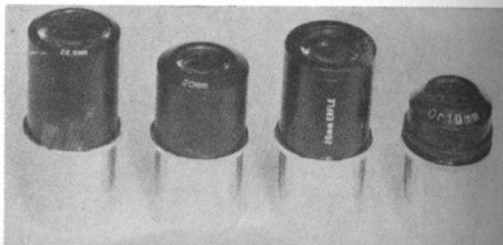
Cast Aluminum Mirror Cells: for 6", 8", 10", and 12 1/2" to fit our tubes, 16" Mirror Cell fabricated steel also available.

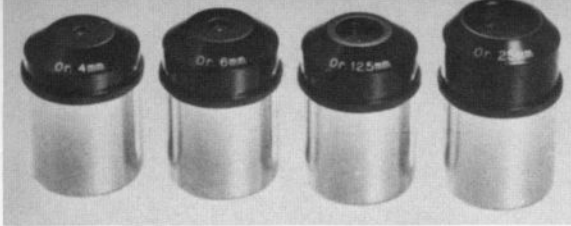
Special 1/4" Kellner and Galland Orthoscopic eyepieces available in 28mm, 16.3 Erfle, 10.5mm, and 4mm. These are among the World's finest Orthoscopic Oculars.



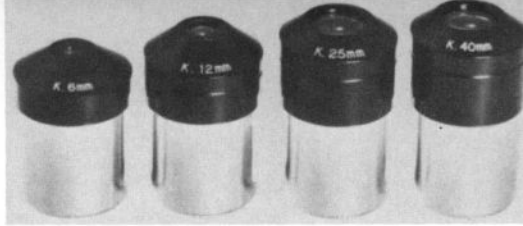
Cave Astrola Deluxe Spiders for all size tubes: 7" dia. to 16" dia. in stock always. Our diagonal holder sizes are 1.050", 1.300", 1.550", 1.830", 2.140", 2.610", and 3.100".

Orthostar Orthoscopic Oculars have exclusively been sold by Cave Optical for over 25 years with the finest enhanced coating. These Orthoscopic and Erfle Oculars are 26.6mm, 20mm, 16mm, and the world famous 20mm Erfle with 80 degree field.

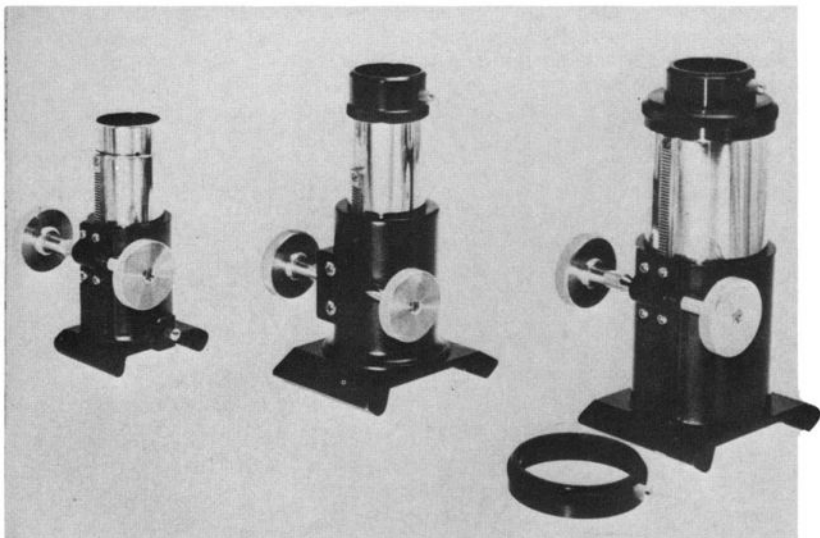




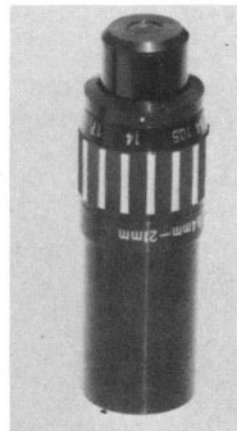
Orthoscopic Oculars: finest quality, excellent. Available in 25mm, 18mm, 12.5mm, 9mm, 6mm, 5mm, and 4mm.



1/4" standard finest quality Kellners: as supplied on Astrola 6" standard, and 8" lightweight deluxe telescope only. Available in 40mm, 25mm, 12mm, and 6mm only.

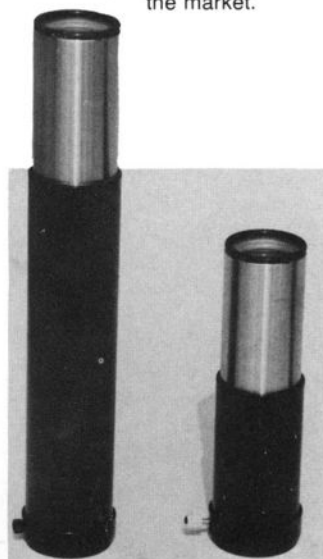
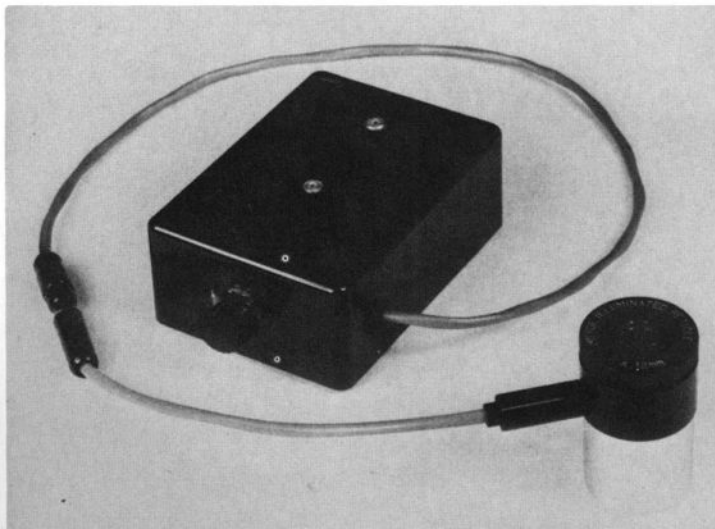


Rack and Pinion Focuser: 2 smaller focusers, 1/4" standard, simple, inexpensive model, and expensive fancy model, also our 2" Rack and Pinion Focuser long travel focuser with 1/4", and 2" adapters.

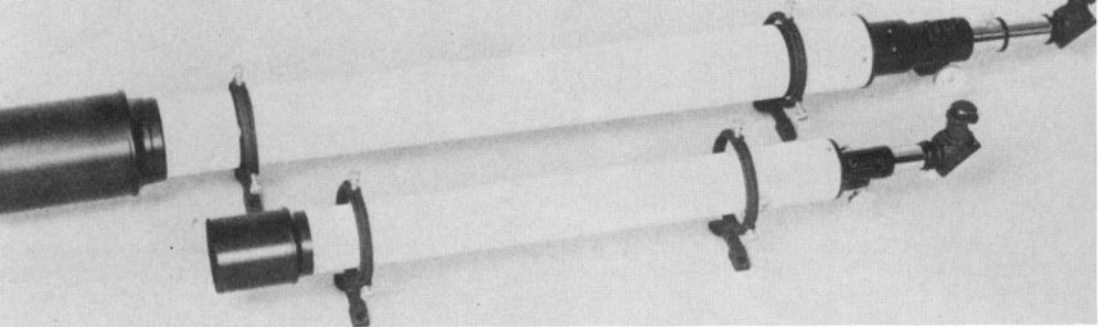


Astrola 1/4" "ZOOM" Ocular: 21mm to 8mm Erfle, the original and the one and only "Zoom" ocular on the market.

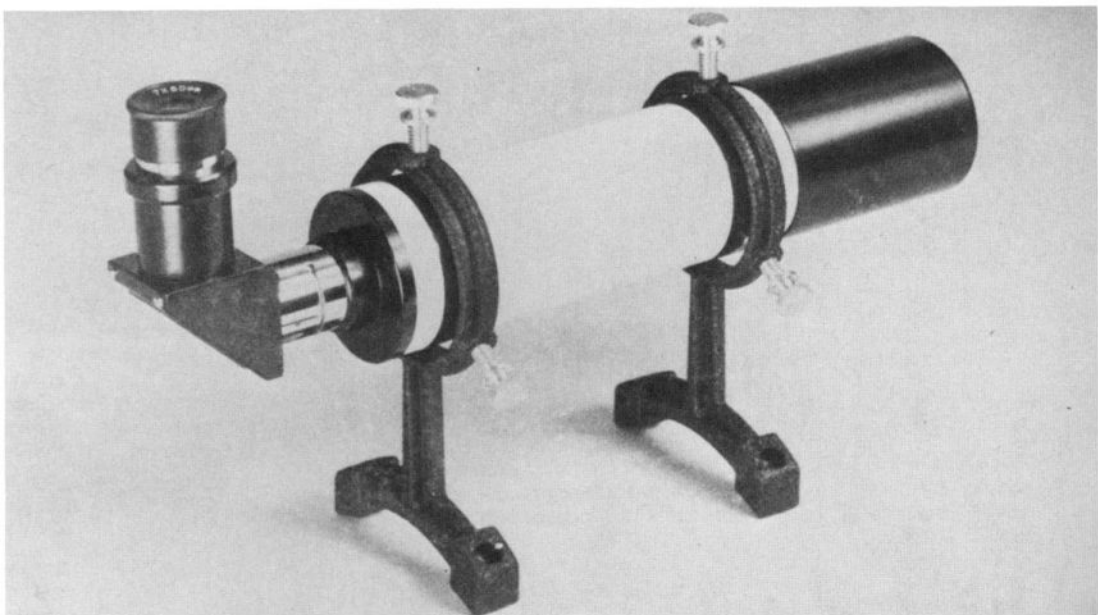
Illuminated 1/4" eyepiece with reticle.



Cave Astrola Deluxe Barlow Lenses: the World's finest 2X short tube, 3X long tube, enhanced coated, completely color

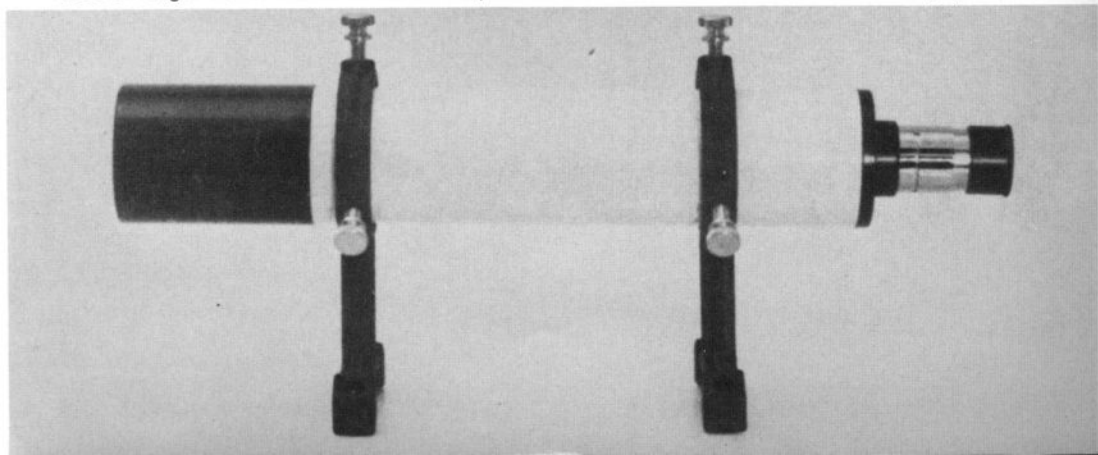


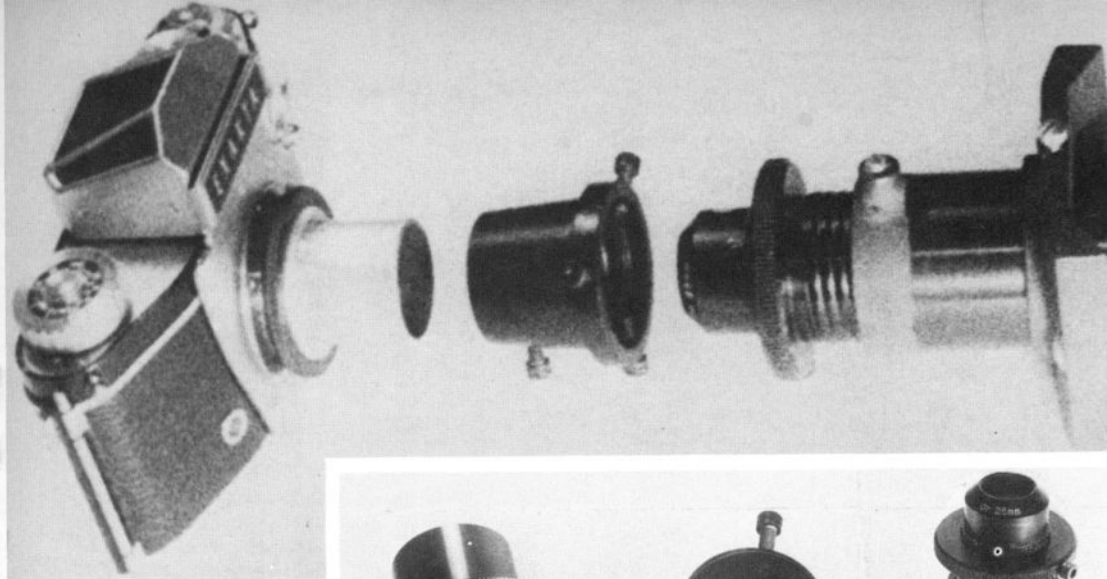
60mm photoguide scope with star diagonal: one crosshair eyepiece pictured smaller photoguide 60mm with mounting brackets with star diagonal, and the finest crosshair eyepiece. An illuminated crosshair eyepiece with battery pack available at extra cost. Large photo guide scope is 80mm, 3/4" is recommended for use on larger telescopes for excellent photograph guiding with star diagonal and crosshair eyepiece, both guide scope and rack and pinion focuser.



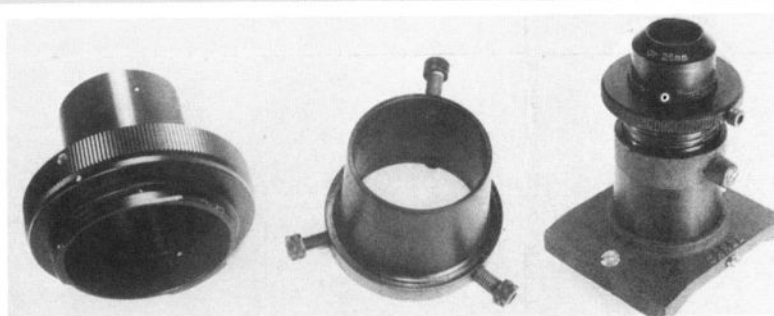
Right Angle 8 X 50 finder with mounting brackets with 4 1/2 degree field of the sky: these finders have the finest crosshair eyepiece.

8 X 50 Finder with finder brackets: these finders have a 7 degree field view, focusable, fully achromatic, used on larger model Cave Astrola telescopes. These finders have the finest crosshair eyepieces.

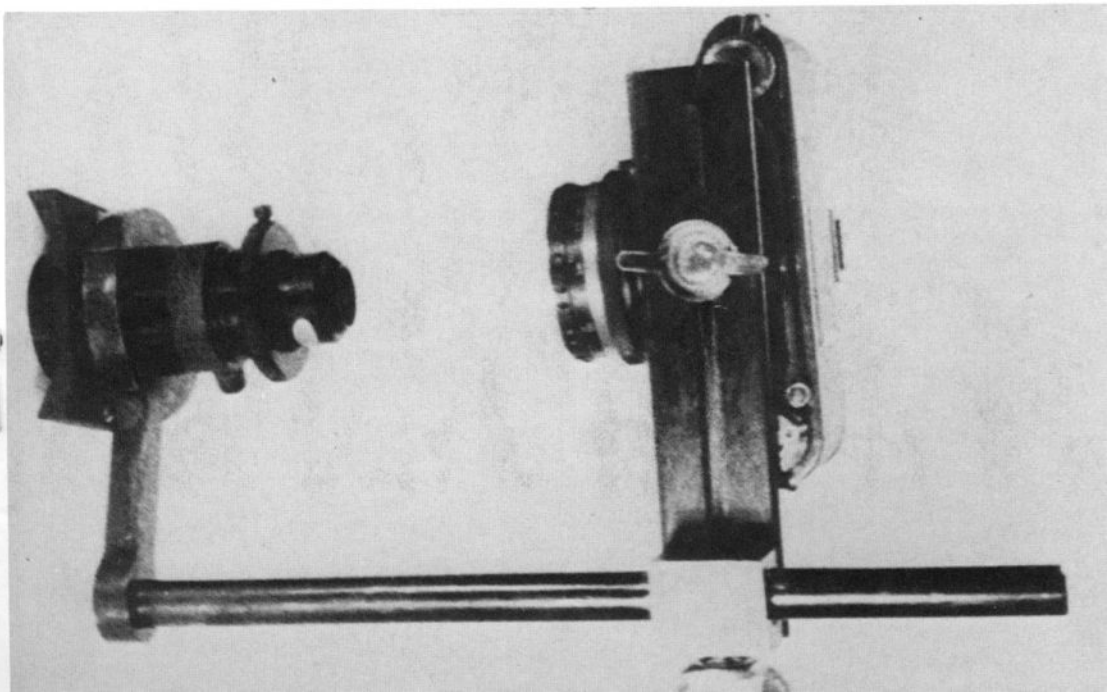


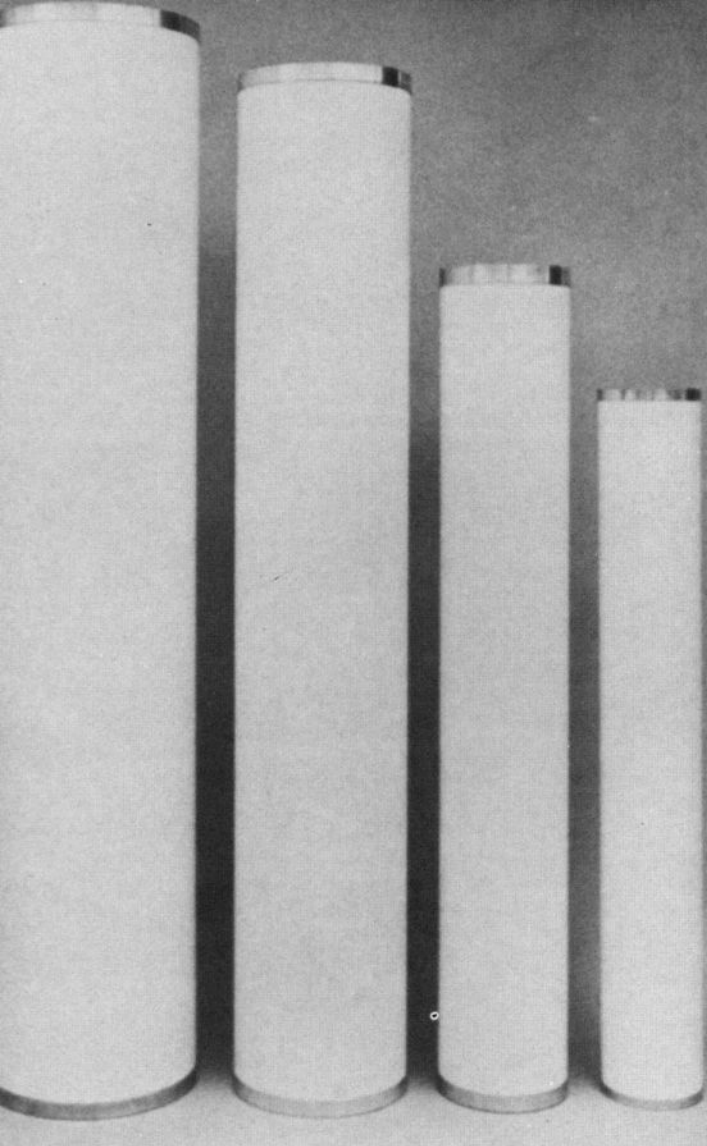


CARLE Prime Focus Camera Adapter. Inexpensive CARLE Eyepiece Projection Adapter. CARLE Photo-visual Helical Focuser.



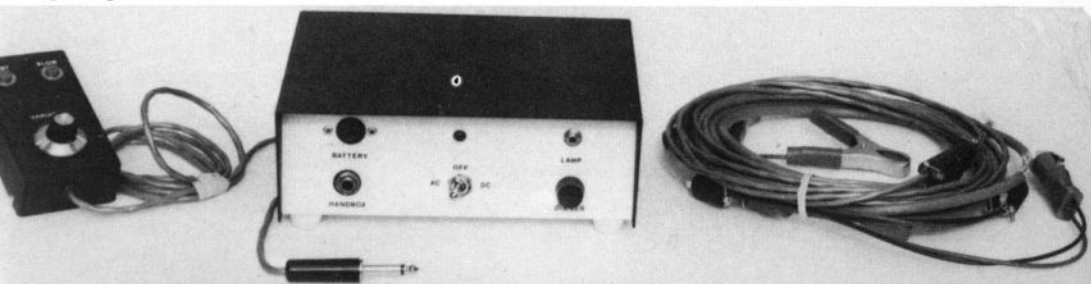
CARLE Single Armed Bracket Universal Camera Adapter.



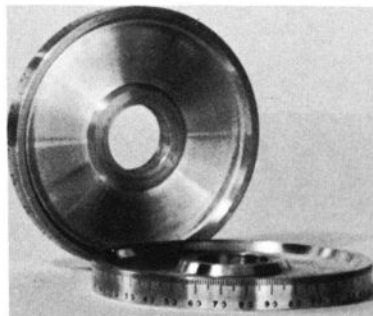


Fiberglass Tubes: available in 7 $\frac{1}{4}$ ", 9 $\frac{3}{4}$ ", and 12 $\frac{3}{4}$ " and 16" are pictured. These are extremely lightweight, totally unbreakable, porcelainized, high glossed tube. Each tube with two end rings of the very finest quality.

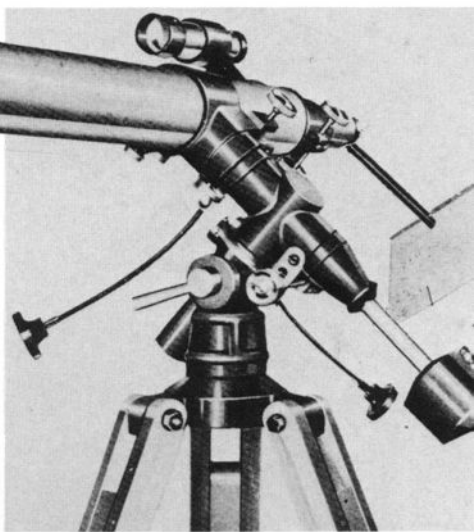
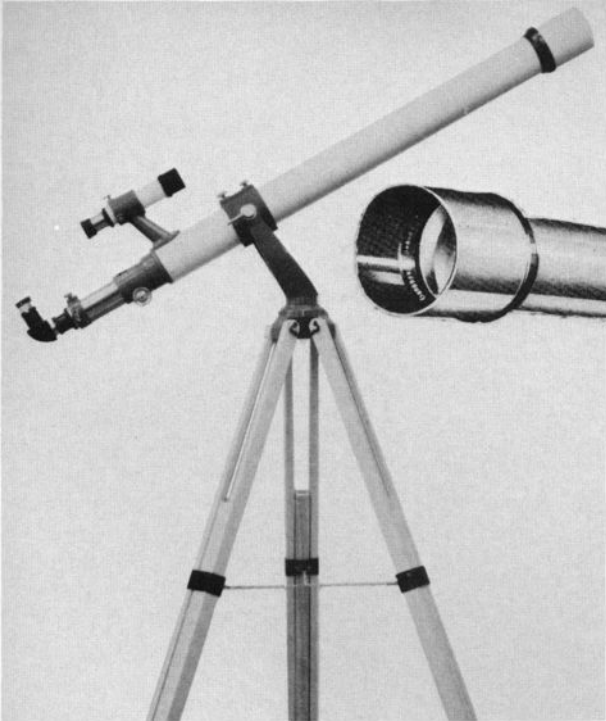
Electronic Frequency Drive Corrector: available in three basic models, a 12 volt DC only, 110 volt AC, and 12 volt DC with 40% plus or minus sidereal rate or lock in for sidereal rate, Deluxe Frequency Drive Corrector operating the sidereal rate stop and double speed sidereal rate for extremely fine photographic guiding.



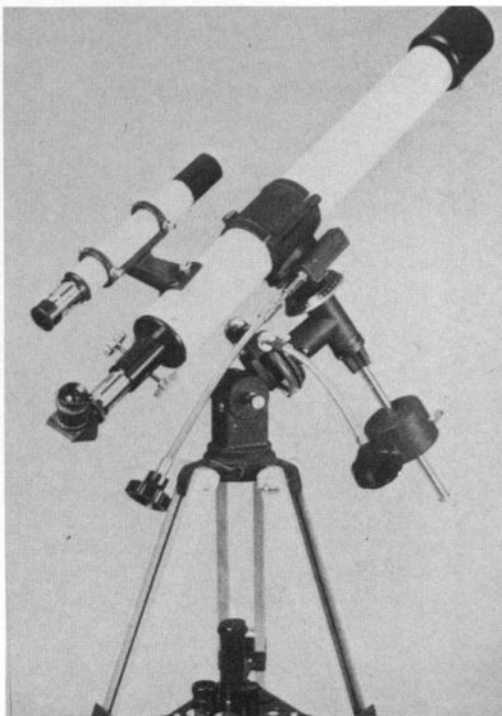
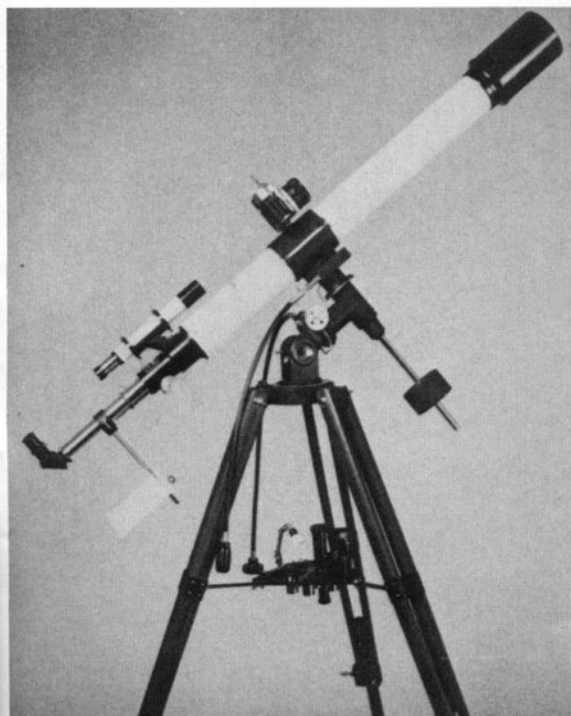
Cave Astrola Magnusson Setting Circles: in 4" dia. 1" hub, 6" dia. 1 $\frac{1}{2}$ " hub, 8" dia. 1 $\frac{1}{2}$ " hub, and 10" dia. 2 $\frac{7}{16}$ " hub. These circles are the finest on the market, engine head divided, which have been the standard excellent quality circles available in America for 25 years.

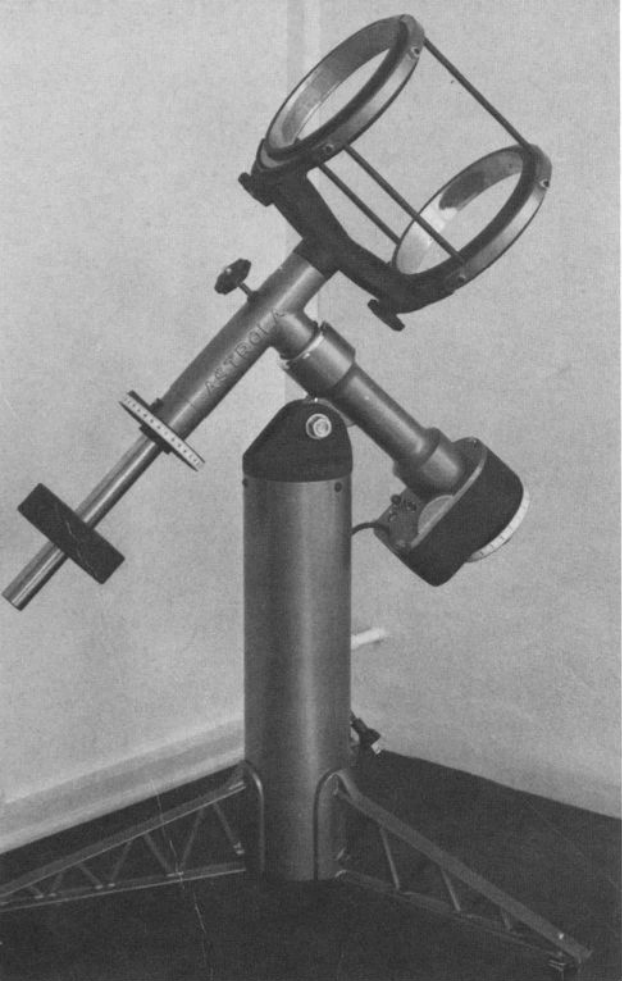


Quality selected imported refractors.



Illustrated are 4 small Astronomical refractors, 3 equatorials, and a 60mm Alt-azimuth, top left illustration 60mm refractor with normal accessories and case, top right 80mm Mayflower Refractor, equatorial head, mount, wood case, all accessories and clockdrive available, bottom left, 80mm equatorial slow motions all accessories, cardboard case and clockdrive available, bottom right 60mm equatorial with slow motion controls, cardboard case, clockdrive available.





mounts are twice the size of the 1" lightweight mounting. Also available are the supercompact deluxe equatorial mounts, the transportable 12½" Model "D", the 8", 10", and 12" portable Cassegrain mountings and the very large Observatory 12½", and 16" Observatory mountings. The complete telescope of all these mountings are illustrated as complete instruments within the main catalog.

Small items, including finders, eyepieces, cells, spiders, mirrors, focusers, diagonals, and CARLE Accessories, are available for immediate delivery. Cave Astrola Telescope and Mountings which must be manufactured are available from rapid to somewhat longer delivery, depending on quantity of back orders at a given time, and back orders are taken in rotation from the time received.

Cave Astrola Mountings are available for reflecting telescopes from 6" to 16". We manufacture these superb mountings in 1" standard shaft size equivalent in Ball Bearing Areas of mountings 1¾". Small mountings are designed for lightweight 6", 8" and 10", and are available in standard models without clockdrive or setting circles, but with column and leg stand, basic equatorial head with clamps, declination axis counterweight, and saddle with felt-lined straps for your size tube. Each mounting has double raced tapered preloaded, ball bearings on both axis. Heavyduty models are equipped with 1½" solid precision, ground and polished steel shafts and preloaded ball bearings with 2⅝" equivalent shaft size in the bearing areas. These mountings are available as standard mountings without clockdrive or setting circles. All deluxe mounts are with electric clockdrive, 6" or larger setting circles, and these

