

KATOPTARON[®]

Model TS 500 EM (including TS 500 MV)

Telephoto System

THE WORLD'S FINEST TELEPHOTO SYSTEM

If you want to own the world's finest 500mm telephoto lens, you need look no further. The KATOPTARON TS 500 EM is the ideal system for amateurs and professionals alike who require distortion-free color rendition from a high magnification telephoto optical system.

Perfect Color Rendition Guaranteed

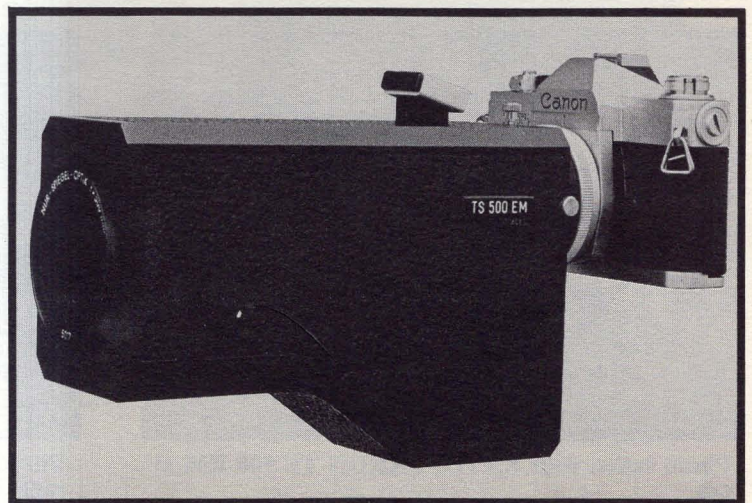
The KATOPTARON EM is the first commercially-available *all-mirror* telephoto optical system with guaranteed perfect color rendition. Not "good". Not "excellent". PERFECT.

In all telephotos using lenses, light is refracted. Because the different colors refract at slightly different angles, there is always some loss in color fidelity. Some *correction* is possible, but perfection is impossible with *lensed* telephotos.

The all-mirror design of the KATOPTARON requires no lenses. Therefore, no refraction takes place. All colors are faithfully reproduced. There is no color distortion whatsoever. This is unique and unprecedented.

Optically Superior Images

The KATOPTARON EM will produce sharper, clearer photographs with astounding color clarity and richness. Accordingly, enlargements are of significantly improved quality. Furthermore, the EM will not produce those unwanted "hot spots" and "doughnut" effects caused by all other mirror optical systems.



Unique Finger Tip Depth-of-Field and Focus Controls

The KATOPTARON EM has a variable f /stop control ($f/8$ to $f/32$) for depth-of-field, aperture and exposure. These adjustments are easily made by rotating a conveniently located dial with the left thumb. Simultaneously, the left forefinger can adjust the focus control on the EM's right side. The right hand is always free to set the shutter speed, advance the film, etc. Both f /stop and focusing controls are quick, sure and positive.

KATOPTARON EM's finger tip controls offer a heretofore unavailable ease and convenience in long telephoto user comfort. All this is accomplished in a 35 ounce unit that eliminates the need for a large shoulder harness or gun stock.



Macro Photography

The dial at the rear of the EM enables adjustment of focus for both near and far ranges through an ingenious Makowsky-designed "floating-mirror" system. At the "2" (two meter) setting, the EM has a reproduction ratio of 1:3. Of course, all the perfect color reproduction characteristics of the EM are retained when the EM is used in the macro mode.

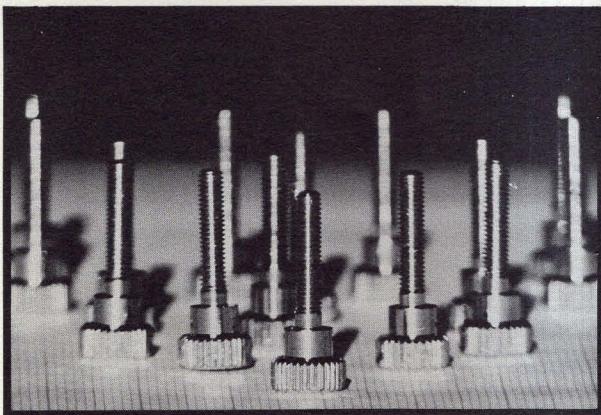


Photo taken with KATOPTARON TS 500 EM at $f/8$.

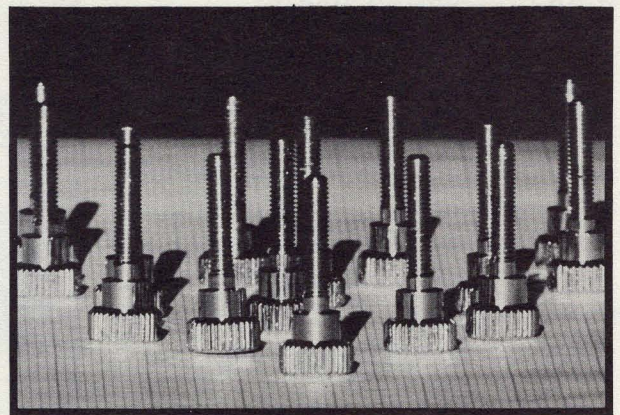


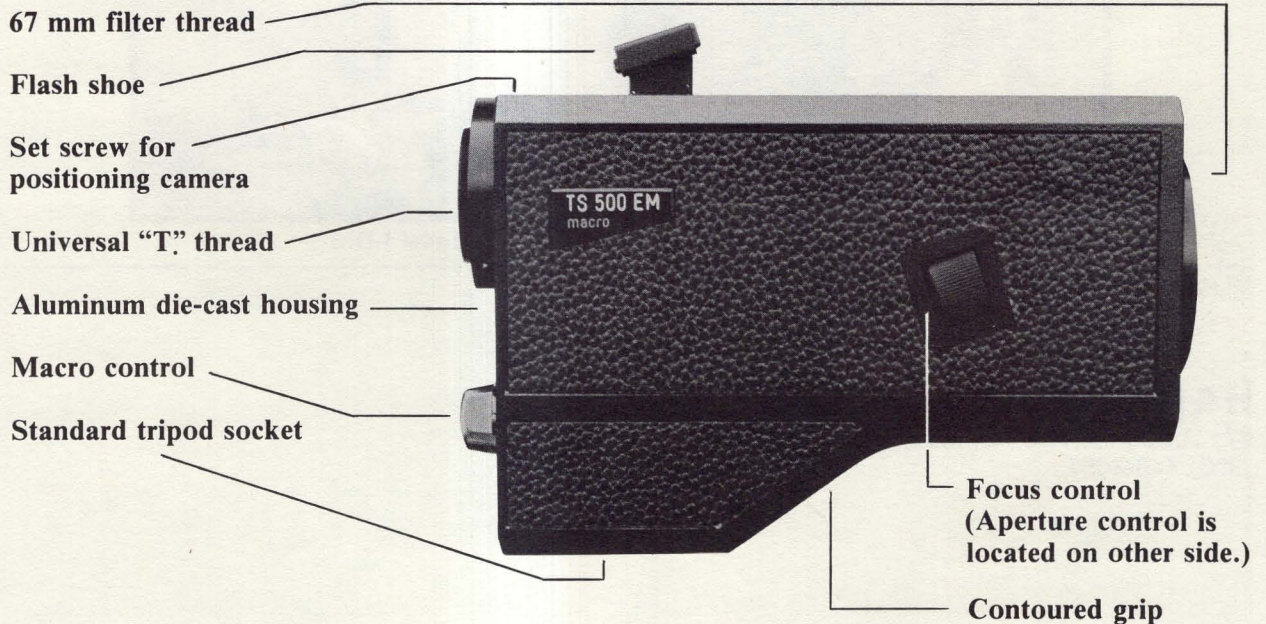
Photo taken with KATOPTARON TS 500 EM at $f/22$. Notice the depth-of-field.

Offset Angle of Viewing

In order to get maximum focal length with minimal size and weight, the optical path in the KATOPTARON EM is offset by 23 degrees from horizontal. Therefore, the instrument is tipped forward by that angle in use, which means that the top surface is actually pointed somewhat below the subject being viewed. This makes the EM ideal for surveillance and candid, since it appears to be pointed away from the subject.

KATOPTARON EM Features

- * all-mirror construction
- * variable aperture control (f/8 - f/32)
- * focus to 6.25 feet with 1:3 reproduction ratio
- * "floating mirror elements"
--a KATOPTARON exclusive
- * easy interchange of camera/
accessory mount via the
universal "T" mount system
- * a comprehensive selection of accessories which allows you to turn the EM into a low-power long distance microscope, spotting scope or telescope.



OTHER KATOPTARON SYSTEMS

Model TS 500 MV

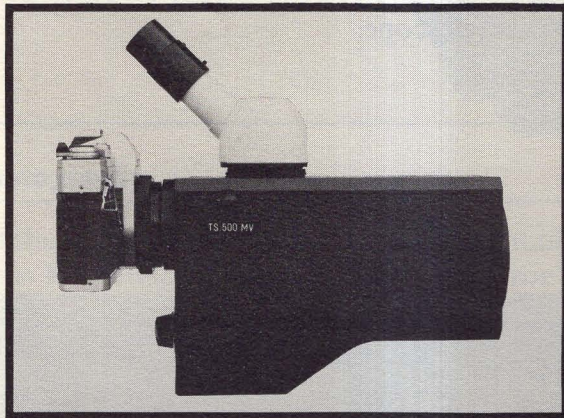
Low-power Long Distance Microscope

The KATOPTARON TS 500 MV has all of the features of the EM. In addition, the MV incorporates a flip-mirror and a top-mounted monocular observation tube. When the mirror is in the up position, the incoming light is reflected into the monocular as an erect (upright) image. The MV was designed primarily for use as a low-power long distance microscope. It can also be used as a telephoto lens, spotting scope, or telescope. In such instances it functions exactly as does the EM.

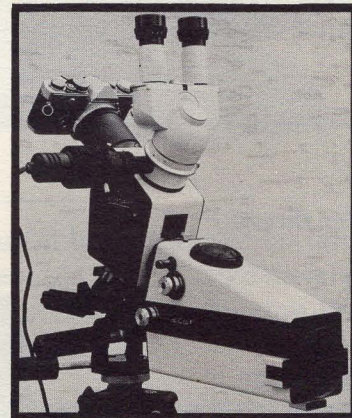
Model LDM-1

High-power Long Distance Microscope

In addition to the EM and MV, the same KATOPTARON optical system has been incorporated into the LDM-1 model for use as a high-power long distance microscope. The LDM-1 can be used where observations of small objects are desired, at high magnification, but require that the observations be made from a remote vantage point. The LDM-1 can provide true microscope magnifications up to 90.6x at 70cm (27.56 inches). Our long distance microscope brochure provides further details.



Model TS 500 MV



Model LDM-1

All specifications are subject to change without notice.

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