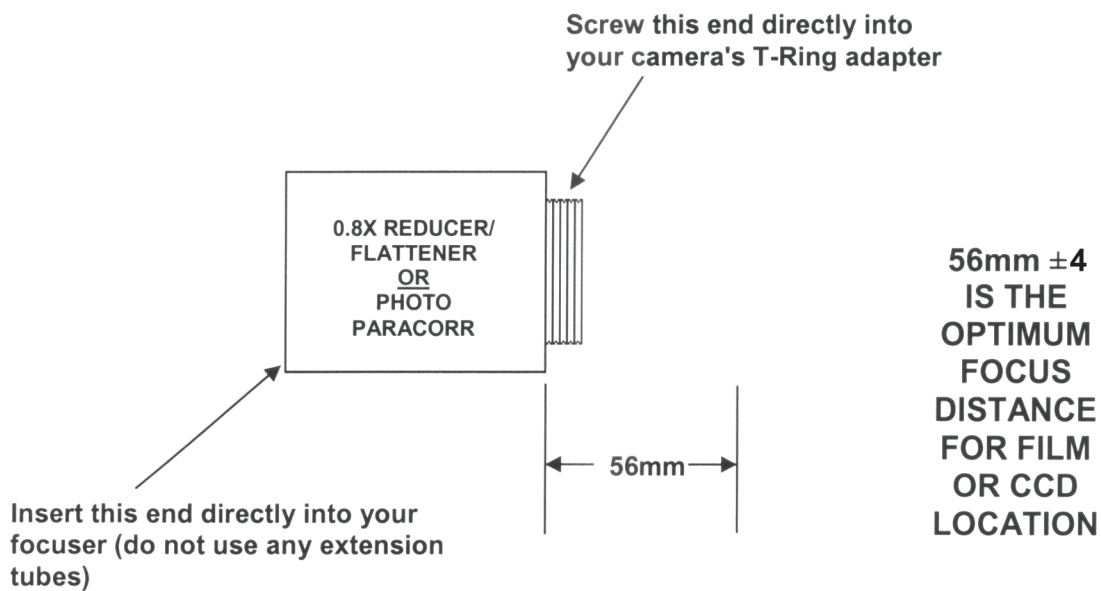


(TRF-2008)

FOCAL REDUCER/FLATTENER

Thank you for purchasing Tele Vue's 0.8x reducer/flattener (TRF-2008) for 400 to 600mm focal length telescopes. While optimized for our Tele Vue-85 telescope, we have found it quite effective with all doublet or triplet refractors within this focal length range.

Installation is simple. Thread the camera T-ring onto the 0.8x Reducer/Flattener. Then, attach the T-ring to your 35mm camera. Remove the diagonal from your telescope's focuser and replace it with the flattener/camera assembly. Your telescope's focal length and f/ratio are now 0.8 times their normal figures.



V11/17/2011

To All Owners of Tele Vue-76 and Tele Vue-85 Telescopes

If you are considering your Tele Vue-76 or Tele Vue-85 for astrophotography use, the following article from *Sky & Telescope* (July 1999, p.67), describing our 0.8x Reducer/Flattener (TRF-2008), might be of interest to you.



Less Magnification for Photography

WHEN I REVIEWED TELE VUE'S 85-MILLIMETER APO-chromatic refractor in last September's issue (page 59), I noted that astrophotographers planning to do serious work with the instrument needed the optional field flattener. Now the company has developed an even better photographic accessory

S&T TEST REPORT

for this telescope and its sibling the Pronto refractor.

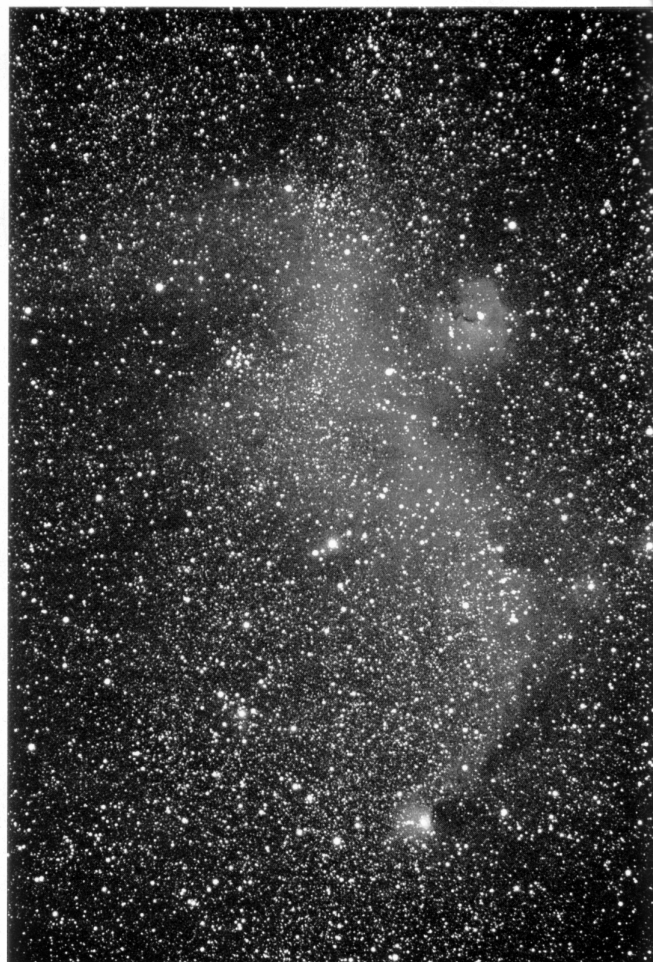
The 0.8x Reducer/Flattener is a three-element lens that turns the 600-mm f/7 optics of the Tele Vue 85 into a 480-mm f/5.6 system that is highly corrected for astrophotography with 35-mm cameras. The Pronto's 480-mm f/6.8 optics become a 384-mm f/5.4 system. The 0.8x Reducer/Flattener is strictly for photographic use and will not work with visual accessories. It is threaded for standard 48-mm filters.

By Chris Cook

The lens flattens the telescope's field, yielding more uniform focus across the film plane. It also minimizes vignetting of the 35-mm frame and allows almost a full f/stop increase in photographic speed. The 0.8x Reducer/Flattener virtually eliminates the secondary color seen on star images at the corners of frames of photographs made with the field flattener that I originally tested with the Tele Vue 85.

To test the new system I chose the large, diffuse nebulosity IC 2177 in the winter Milky Way, where the dense star field would be a challenge of the new lens's capabilities.

As the result here clearly shows, the 0.8x Reducer/Flattener performs superbly. Star images are perfectly round to the very corners of the field, and there is minimal vignetting. A high-magnification examination of the images reveals little, if any, secondary color even at the edge of the field. This accessory is a must-have for someone planning to use the Tele Vue 85 photographically.



CHRIS COOK does most of his astrophotography from dark sites in the mountains and deserts of Southern California.

Tele Vue 0.8x Reducer/Flattener

Photographic corrector for Tele Vue 85 and Pronto refractors

Street Price: about \$255.00

Tele Vue

32 Elkay Dr.

Chester, NY 10918

Phone: 845-469-4551

www.televue.com



The diffuse nebulosity IC 2177 northeast of Sirius is informally known among astrophotographers as the Seagull Nebula. This rich field in the Northern Hemisphere's winter Milky Way proved a critical test of Tele Vue's new 0.8x Reducer/Flattener with the Tele Vue 85 refractor. The 2½°-wide field shows round stars to the very corners of the image. This full-frame view was made by compositing four 30-minute exposures. Cook's original Kodak Pro 400 PPF negatives were scanned at a resolution of 3,048 dots per inch and blended with *Picture Window* before being enhanced with *Adobe Photoshop*. North is up and east is to the left.