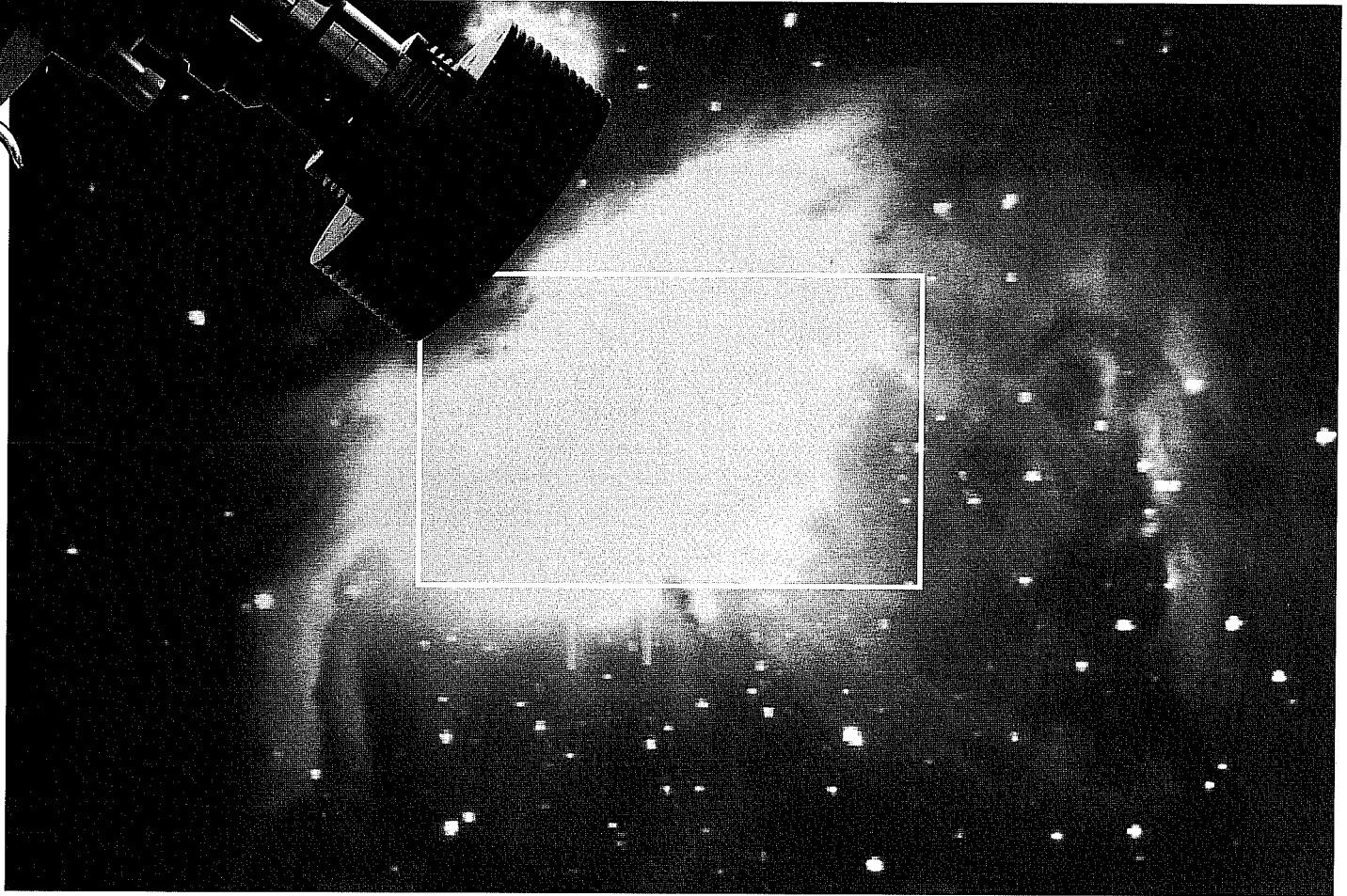


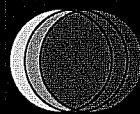
MAXfield

f/3.3 Telecompressor System



M42 - digitally unaltered 20 second exposure using ST-6 and 10" SCT working at f/3.3 (33 inch effective focal length). Inner box shows ST-6 field of view at prime focus without telecompression.

The new **MAXfield** 0.33X telecompressor lens system now offers the widest field of view available to CCD and Schmidt-Cassegrain Telescope users. Digital astroimagers can now achieve **nine times more area** than available using prime focus techniques. Designed primarily for use with medium and small format CCD cameras with chip diagonals up to 11 mm, the **MAXfield** makes centering and composing an image easier than ever. The **MAXfield** design has been optimized to correct for coma and field curvature in commercially available f/10 SCT's within the spectral region most sensitive to CCD's. With the **MAXfield**, f/10 systems work at an incredible f/3.3. For tri-color work, 2" filters are available and the **MAXfield**'s elegant design allows for easy removal and insertion of the threaded filters without refocusing! Call today for CCD camera compatibility and pricing information. *Not recommended for f/6.3 SCT systems or other telescope designs.*



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Seasoned astroimagers with experience using CCD cameras on extended objects soon realize the need for a wider field of view. At prime focus, even the larger TC-241 chip of the SBIG ST-6 camera provides only about 1/14th the area of a typical 35mm film. For digital astrophotography, there is an obvious need for a telecompressor. The **MAXfield** provides the needed telecompression by acting as a 0.33X focal reducer. Thus the typical f/10 Schmidt-Cassegrain telescope becomes a fast f/3.3 optical system. Exposure times are decreased to 1/9th the usual time and the field-of-view now covers nine times more area.

The **MAXfield** design is a three-element lens system optimized and corrected for the region of peak CCD sensitivity 550 to 850 nm. Star images are small and round to the very edge of the field. See Figure 1.

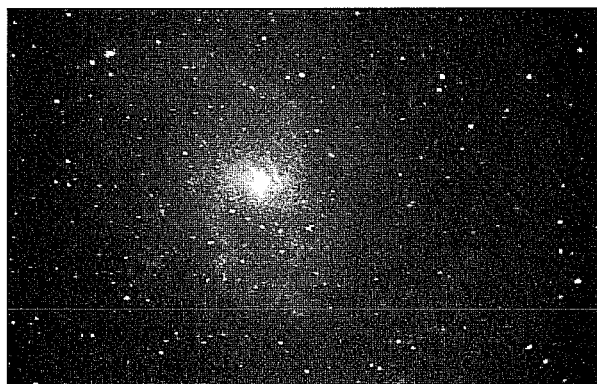


Figure 1. M33 - 20 second exposure with ST-6 CCD and 10" SCT at f/3.3 using #23A red filter.

Mechanically, the **MAXfield** is designed to be extremely versatile and easy to use. First, a telescope adapter with a wide, knurled grip threads directly to the Celestron or Meade. Two side mounted thumbscrews hold the lens assembly in place and a keyway insures perfect alignment each time the lens assembly with camera is inserted. At the camera end, a rotatable CCD mounting plate attaches the CCD

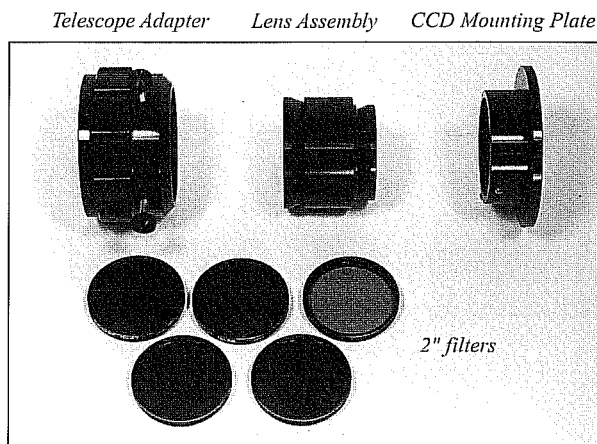


Figure 2. **MAXfield** 0.33X telecompressor system.

camera to the lens assembly. A variety of mounting plates are available for different CCD cameras. Consult price list for cameras supported and mounting plates. Figure 2 shows a component view of the **MAXfield** telecompressor system.

In use, the observer will first attach the mounting plate to the CCD camera. Next the lens assembly is inserted into the mounting plate and secured by the three setscrews. The telescope adapter with the knurled grip is attached to the rear cell of the Schmidt-Cassegrain Telescope. The camera with lens assembly is then inserted into the telescope adapter and secured by the two thumbscrews. Finally, the three setscrews located around the mounting plate are loosened carefully and the camera is rotated for proper orientation of the desired field to the monitor. You are now ready to focus and use the system to capture spectacular images.

For tri-color and other filtered images, the lens assembly and camera can be removed from the telescope adapter for insertion of color filters. The keyway and precision mechanical stop will insure precise realignment each time. Consult current price list for availability of 2" color filters.

MAXfield