

IV. Meade® Observer Series Refracting Telescopes



The refracting telescope offers the serious beginning-to-intermediate amateur a compact, highly versatile system requiring an absolute minimum of maintenance. For many, the 2.4" or 3.1" refractor provides all the observational capability ever required. The basic soundness of its design, combined with its operational simplicity, make the refractor the instrument-of-choice for parents seeking a quality telescope investment for a gifted, science-minded youngster, and for the layman who may not aspire to larger, more sophisticated or expensive instruments. Meade 2.4" and 3.1" refractor models include achromatic, air-spaced objective lenses warranted to resolve to the theoretical limits for their respective apertures.

Specifications

Model 226: 2.4" Altazimuth Refractor: An excellent "first telescope" with all of the optical quality of more sophisticated models. The telescope's mounting permits vertical and horizontal tracking of astronomical objects. Included as standard equipment are a 5 x 24mm viewfinder with crosshairs; diagonal prism; 2 coated Modified Achromatic eyepieces for powers of 28X and 78X; full-length hardwood tripod with accessory shelf; instructions.

Model 291: 2.4" Equatorial Refractor: The equatorial mount of the Model 291 greatly facilitates astronomical tracking, using 2 flexible control cables. Included as standard equipment are a 6 x 30mm viewfinder with crosshairs; deluxe rack and pinion focuser; diagonal prism; 2 coated Modified Achromatic eyepieces for powers of 36X and 100X; equatorial mount with 2 cable controls; setting circles; full-length hardwood tripod with accessory shelf; instructions.

Model 300: 3.1" Equatorial Refractor: The larger aperture of the Model 300 yields images 78% brighter than those in the 2.4" Models 226 or 291, and with a commensurate increase in the level of observable detail. The Model 300 includes as standard equipment a 6 x 30mm viewfinder with crosshairs; deluxe rack and pinion focuser; diagonal prism; 3 coated Modified Achromatic eyepieces for powers of 48X, 100X, and 133X; equatorial mount with 2 cable controls; setting circles; full-length hardwood tripod with accessory shelf; instructions.

Optional Accessories: Camera Adapters (see Item 33 on facing page); Electric Motor Drive #781 (115 volts/60Hz); Additional Eyepieces .965" O.D. (see Item 25 on facing page). (See the Meade Price List for additional accessories.)

IV. Meade® Research-Quality Accessories & Parts

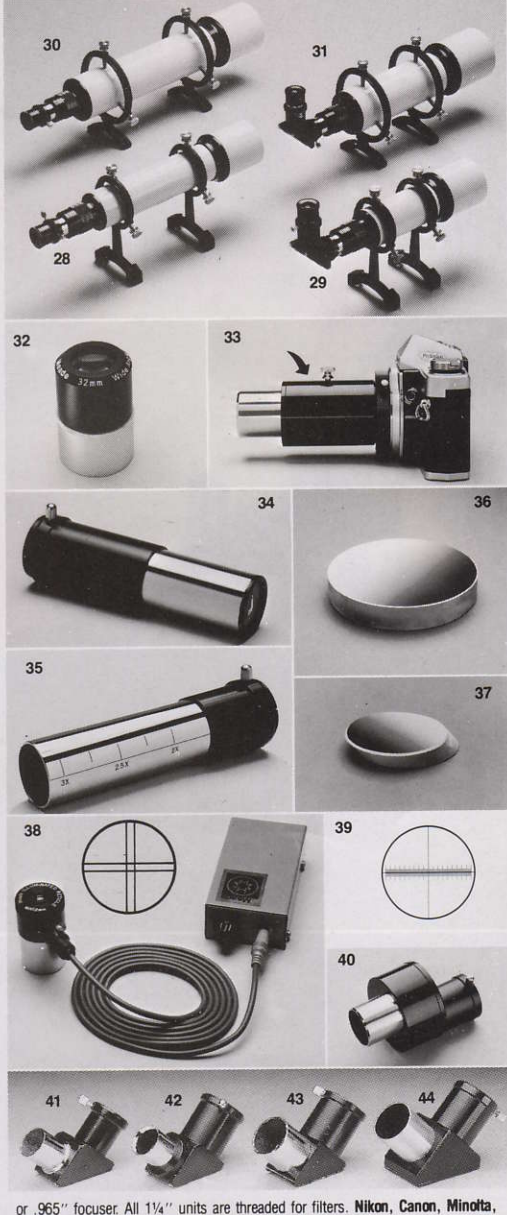
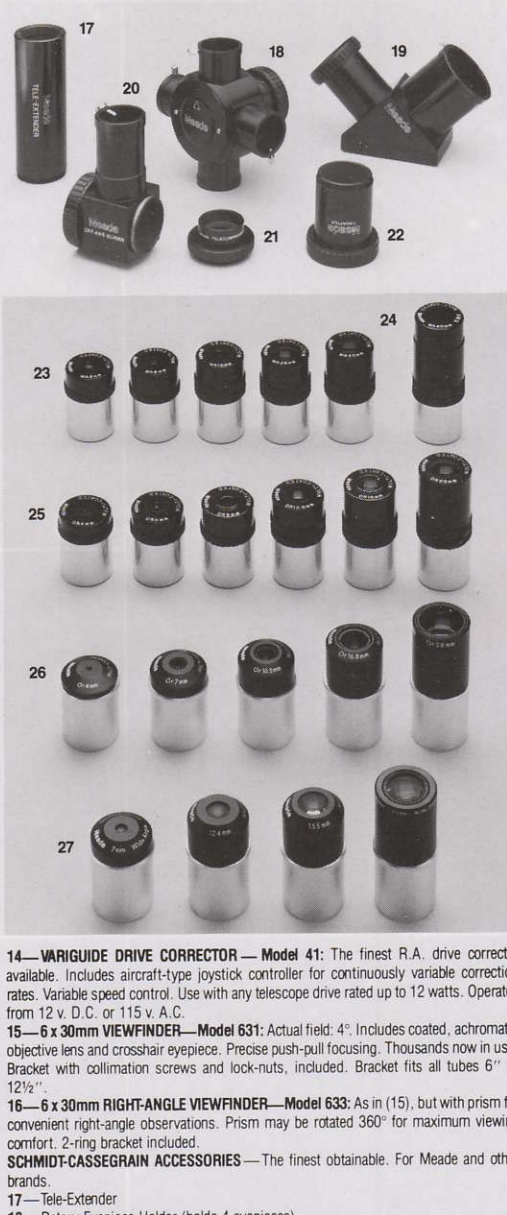


PHOTO-GUIDE TELESCOPES—Each with coated, air-spaced objective, rack-and-pinion focuser, diagonal prism, 9mm crosshair eyepiece.

1—Model 300PG: D=80mm (3.1"); F=1200mm (f/15)
 2—Model 280PG: D=60mm (2.4"); F=700mm (f/11.7)
 3—Model 210PG: D=50mm (2.0"); F=600mm (f/12)

Mounting Rings: for #210PG, #280PG, #300PG

RACK-AND-PINION FOCUSERS—All 3 models include helical-cut rack and variable-tension adjustment for ultra-smooth focusing without backlash. Universal bases fit all tube sizes. Standard 1 1/4" eyepiece holders.

4—Model 67—Strong, lightweight design for 4" to 10" telescopes. 2-3/16" travel. An excellent value.

5—Model 640—A heavy-duty deluxe focuser for 6" to 16" telescopes. Full 3" travel for both visual and photographic applications.

6—Model 680—Accepts both 1 1/4" and 2" eyepieces. Full 3" travel for photo or visual observing with 6" to 18" telescopes.

ACCESSORY CASES—For secure storage of eyepieces, Barlows, filters.

7—Model 54: Thick-wall polyethylene with latch and handle. Holds 7 eyepieces & Barlow filters. Dims. 12" x 8" x 3 3/4"

8—Model 50: Luggage-quality metal case with 2 latches, handle; foam custom fits to your accessories. Dims. 20" x 12" x 6 1/2"

NEBULAR FILTERS—Revolutionary 3-channel filters block natural airglow & sodium and mercury emissions from city lights. Dramatically improve telescope performance visually and photographically.

9—Model 907: 18mm aperture, for .965" O.D. eyepieces
 10—Model 908: 23mm aperture, for 1 1/4" O.D. eyepieces
 11—Model 911: 36mm aperture, threads directly onto rear-cell of Meade and other brands of Schmidt-Cassegrains.

12—**PHOTO-VISUAL COLOR FILTERS**—Top quality optical glass, dyed-in-the-mass, with excellent spectral homogeneity. Thread directly into 1 1/4" O.D. barrels. Filters may be piggybacked. #8 Light Yellow—#11 Yellow-Green—#12 Yellow—#21 Orange—#23A Light Red—#25A Red—#47 Violet—#58 Green—#80A Blue—Polarizer (30% transmission).

13—**VARI-PAK DRIVE CORRECTOR**—Model 43: Supercompact 2" x 3" x 4" design. Fast-slow pushbuttons. Variable speed control. Operates from 12 volts D.C., plugs into standard auto cigarette lighter. The 12-watt output is sufficient for most telescopes to 14" aperture.

14—**VARI-GUIDE DRIVE CORRECTOR**—Model 41: The finest R.A. drive corrector available. Includes aircraft-type joystick controller for continuously variable correction rates. Variable speed control. Use with any telescope drive rated up to 12 watts. Operates from 12 v. D.C. or 115 v. A.C.

15—6 x 30mm **VIEWFINDER**—Model 631: Actual field: 4°. Includes coated, achromatic objective lens and crosshair eyepiece. Precise push-pull focusing. Thousands now in use. Bracket with collimation screws and lock-nuts, included. Bracket fits all tubes 6" to 12 1/2".

16—6 x 30mm **RIGHT-ANGLE VIEWFINDER**—Model 633: As in (15), but with prism for convenient right-angle observations. Prism may be rotated 360° for maximum viewing comfort. 2-ring bracket included.

SCHMIDT-CASSEGRAIN ACCESSORIES—The finest obtainable. For Meade and other brands.

17—Tele-Extender
 18—Rotary Eyepiece Holder (holds 4 eyepieces)
 19—2" Diagonal Mirror (1/10-wave)
 20—Off-Axis Guider Body
 21—Telecompressor (multi-coated)
 22—Adapter

23—**SERIES 2 MODIFIED ACHROMATIC EYEPIECES** (1 1/4" O.D.; MULTI-COATED)—Custom 3-element designs, precisely corrected for chromatic and spherical aberrations. **FOCAL LENGTHS:** MA 6, 9, 12, 25mm, 40mm **Wide-Field.**

24—**MODIFIED ACHROMATIC 40mm EXTRA-WIDE-FIELD EYEPIECE** (1 1/4" O.D.; MULTI-COATED)—Yields widest field obtainable in 1 1/4" O.D. Enlarged field lens and special field-flattening optics with long eye relief

25—**SERIES 2 ORTHOSCOPIC EYEPIECES** (1 1/4" or .965" O.D.; MULTI-COATED, PARFOCAL)—The excellent 4-element high resolution optics of these oculars are all the majority of serious amateurs ever require. Razor sharp 45° fields. Both 1 1/4" and .965" O.D. sets parfocalized.

FOCAL LENGTHS: OR 4, 6, 9, 12.5, 18, and 25mm

26—**RESEARCH-GRADE ORTHOSCOPIC EYEPIECES** (1 1/4" O.D.; MULTI-COATED; PARFOCAL)—The largest selling premium-quality eyepieces in the world, universally acclaimed to be the finest eyepieces obtainable. 4-element systems, unsurpassed in color correction, resolution, and flatness of field. 45° field. **OR 4, 7, 10.5, 16.8, 28mm**

27—**RESEARCH-GRADE ERFLER EYEPIECES** (1 1/4" O.D.; MULTI-COATED; PARFOCAL)—For breathtaking wide-angle observations. 65° fields, parfocalized with our Research-Grade Orthoscopics. **FOCAL LENGTHS:** ER 7, 12.4, 15.5, 20mm

VIEWFINDERS—With helical focusers for ultraprecise control of image sharpness. Coated, achromatic objectives of new Meade design yield fully corrected images throughout the field. Actual field on 50mm models: 4 1/4", on 60mm models: 3 1/2". Crosshair eyepiece, dewcap, dustcap included. Brackets additional.

28—8 x 50mm
 29—8 x 50mm **RIGHT-ANGLE.**
 30—**GIANT 9 x 60mm.**
 31—**GIANT 9 x 60mm RIGHT ANGLE.**
 32—**RESEARCH-GRADE ERFLER 32mm EYEPIECE** (2" O.D.; MULTI-COATED)—Wide-angle, fully-corrected 65° field. The finest eyepiece obtainable in 2" barrel. Adapter Barrel for 1 1/4" O.D. available.

33—**DELUXE CAMERA ADAPTERS**—Adapt your camera to telescope focuser instantly. Individually machined from solid bar aluminum and brass. All units permit both eyepiece projection and first (prime) focus photography. Specify your camera brand and either 1 1/4"

or .965" focuser. All 1 1/4" units are threaded for filters. **Nikon, Canon, Minolta, Pentax K, Konica, Olympus OM, or Universal Thread-Mount**

34—2X and 3X **TELENEGATIVE AMPLIFIERS** (1 1/4" O.D.; MULTI-COATED)—Warranted without qualification to be the world's finest Barlow lenses. Full 26mm clear apertures. Multi-Coated, with virtually flawless optical corrections at all photo-visual wavelengths on any telescope. **2X Model 122; 3X Model 123; 2X Model 131:** Per Model 122, but for .965" focusers, 18mm clear aperture, Multi-Coated.

35—**2X-3X VARIABLE TELENEGATIVE AMPLIFIER** (1 1/4" O.D.; MULTI-COATED)—Model 127: Made to same research standards as Model 122 above, but mounted in a machined sliding cell, for variable power settings between 2X and 3X. Engraved scale indicates power. Multi-Coated

36—**PARABOLIC MIRRORS**—The very finest. 1/10-wave, diffraction-limited primary mirrors. Aluminized and quartz overcoated. **6" 1/8; 6" 1/5; 8" 1/6; 10" 1/6; 12 1/2" 1/6.**

37—**SECONDARY MIRRORS**—Elliptical 1/10-wave flats. Aluminized and overcoated. **1.30" M.A.; 1.52" M.A.; 1.83" M.A.; 2.14" M.A.; 2.60" M.A.; 3.10" M.A.**

38—**ILLUMINATED RETICLE GUIDING EYEPIECE** (1 1/4" O.D.)—New phosphorescent etched double-line reticle permits line illumination from dim to extremely bright. Remote brightness control and 6 ft. cable. Modified Achromatic 12mm optical system. Precisely focusable reticle. Interchangeable barrel for .965" O.D. available.

39—**MICROMETER RETICLE**—Full-field scale for accurate measurements of double star separations, planetary angular diameters, etc. Interchanges with standard 4-line reticle of Item (38) above.

40—**ERECTING PRISMS**—Fully coated Porro prisms. Invert the astronomical image for terrestrial observations with astronomical telescopes. 1 1/4" O.D. or .965" O.D.

DIAGONAL PRISMS—Optical-quality right-angle prisms, fully coated.

41—Model 915: Fits .965" focusers, accepts .965" eyepieces
 42—Model 917: Hybrid diagonal—fits .965" focusers, accepts 1 1/4" O.D. eyepieces
 43—Model 918: 18mm clear aperture. Fits 1 1/4" focusers, accepts 1 1/4" eyepieces
 44—Model 918A: 30mm clear aperture. Fits 1 1/4" focusers, accepts 1 1/4" eyepieces. Enlarged aperture increases field at low power