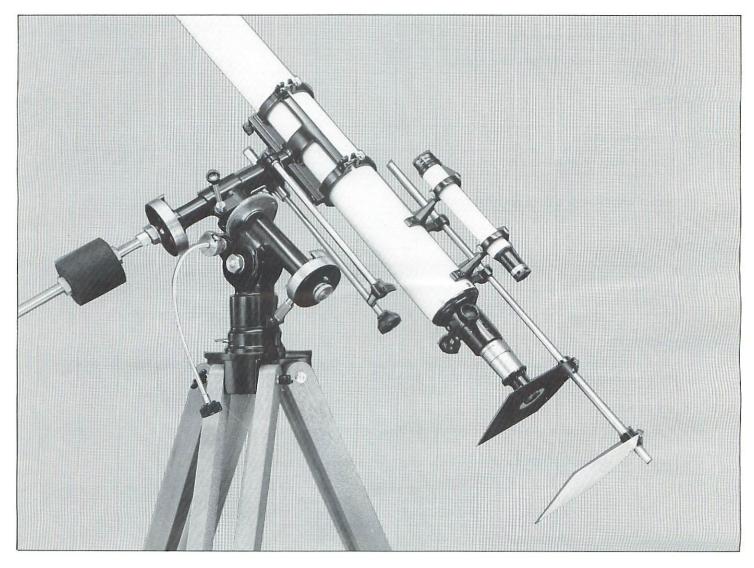
# UNITRON® MODEL 142

### 3 inch EQUATORIAL REFRACTOR



in 24.5mm

#### ADDITIONAL EYEPIECES AVAILABLE\*-

Prod. No. 16622	Model A DUETRON
Prod. No. 16624	Model A UNIHEX
Prod. No. 16643	Erecting Prism‡
Prod. No. 16644	Adapter to use 11/4 " Eyepieces Holders
Prod. No. 16645	Model A Star Diagonal
Prod No. 16653	Model A Sun Diagonal (Herschel

Prod. No. 16653 Model A Sun Diagonal (Herschel Wedge)

Prod. No. 16656 Deluxe Rack and Pinion\*\*

Prod. No. 16664 3" Counterbalance Clamp

Prod. No. 16666 3" UNICLAMP Camera Bracket

Prod. No. 16668 3" UNIBALANCE Set

Prod. No. 16670 60mm Photo Guide Scope

Prod. No. 16684 3" Synchronous Motor Drive

Prod. No. 16690 Extra, Small Counterweight

- Powers indicated are doubled when the Achromatic Amplifer is used.
- † Must be used in UNIHEX or Prod. No. 16644.
- \*\* Must be used with Prod. No. 16658, Coupling for 3 1/16" i.d. tubing.

#### ADDITIONAL EYEPIECES AVAILABLE\*-

Prod. No. 16627
Prod. No. 16635
Prod. No. 16636
Prod. No. 16637

MODEL 142—Complete with Equatorial Mounting and slow motion controls for declination and right ascension, extension flexible cable for R.A. control, supplementary R.A. slow motion and provision for attaching accessory motor drive, setting circles and verniers, tripod and accessories shelf, 8x-30mm viewfinder, Standard rack and pinion focusing mechanism, choice of 5 coated eyepieces; 6mm (200x), 9mm (133x), 12.5mm (96x), 18mm (67x), 25mm (48x), solar aperture diaphragm sun projecting screen, dewcap, dustcap, wooden cabinets, instructions.



#### **SPECIFICATIONS**

# Unitron Model 142 3" Equatorial Refractor

#### 1. DIMENSIONS:

Length (eyepiece to dustcap)	47"	
Height of instrument (ground to cradle)	59 "	

#### 2. WEIGHT:

Shipping weight	80 lbs.
Instrument in observing position	46 lbs.

#### 3. RIGHT ASCENSION & DECLINATION TRAVEL:

	Fast Motion	Slow Motion	Angular travel/revolution of slow motion control knob	
Right ascension	14 <sup>h</sup> 30 <sup>m</sup>	1" 30"	5 <sup>m</sup>	
Declination	360°	30° 30′	1° 30′	

#### 4. OBJECTIVE:

Achromatic, air-spaced, coated 2-element, 75mm clear aperture, 1200mm focal length, f/16, resolving power 1.5 arcsec, minimum magnitude observable +11.8, field of view 4° 20 '.

#### 5. VIEWFINDER:

Focusable 8X eyepiece with crossline, 30mm objective, field of view 4° 22'.

#### 6. TABLE OF MAGNIFICATIONS (Objective focal length + Eyepiece focal length)

Focal Length of Eyepiece	Magnification w/o Ach. Amp.	Mag. w/ach. Amp.	Field of view w/o Ach. Amp.
0 4mm	300X	600X	
0 5	240	380	0° 13′
0 6*	200	400	0° 15′
AS 7	171	342	0° 17′
AS 9*	131	262	0° 20′
K 12.5*	96	192	0° 28′
K 18*	67	134	0° 40′
R 25*	R 25* 48		0° 50′
M 40† 30		60	1° 20′

<sup>\*</sup> Supplied as standard equipment.

## 7. WARRANTY: Full 25-year warranty. Written warranty can be obtained free of charge upon specific written request, at the address shown below.

<sup>†</sup> Must be used in UNIHEX or 11/4-inch adapter.