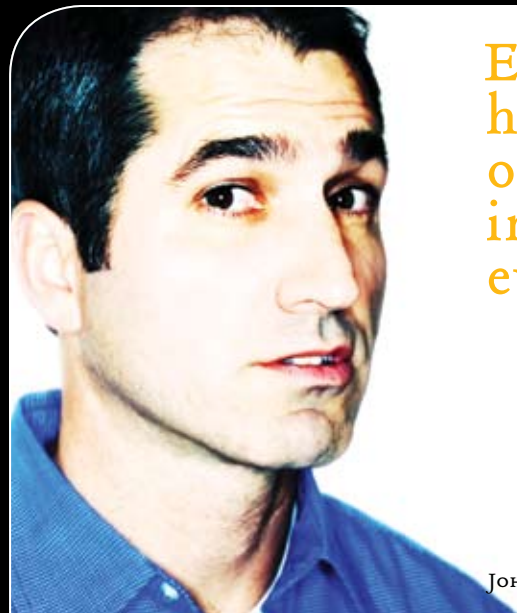


# .07 SPECIALIST Series 5000™ ED APO



ED APO Refractors have produced some of the most beautiful images of the heavens ever taken from Earth.

JOHN KINKEAD: creative director, screenplay author, APO Refractor enthusiast.

**Level:** *Seeking perfection.*

**Mindset:**

*I enjoy observing the moon and planets in exquisite detail. I want to take gorgeous wide-field, high-contrast astrophotographs.*

**Mantra:**

*Only the best.*

**Priorities:**

*It's all about the view.*

**Goals:**

*Observe and take wide-field astrophotographs of objects like the moon, planets, double stars, nebulae, galaxies and clusters with incredible color, contrast and detail.*

ALSO USED BY: FANATIC, MASTER, GURU. >>



**Performance:**

*Excellent for wide-field deep sky astrophotography and visual observation of the moon, planets, double stars and clusters.*

**Optical Design:**

*Apochromatic Refractor (p.45)*

**Strengths:**

*Fast focal ratio. Lightweight. Portable. Crisp. Clear. High contrast.*

**Buzz:**

*Avid astronomer John Hoot said the Meade Series 5000 ED APO "kicked the tail of my old semi-APO that cost twice as much."*



.04

FANATIC



.05

MASTER



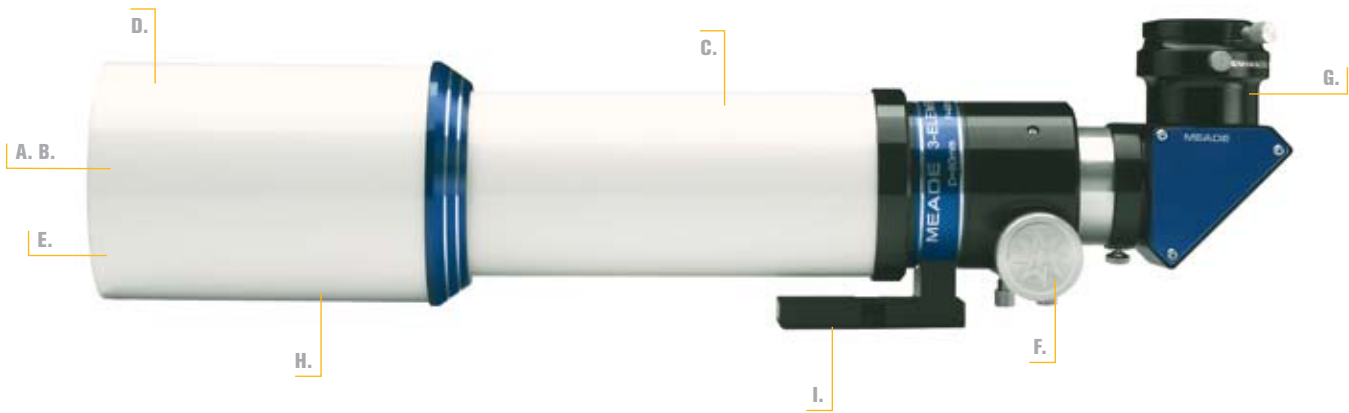
.06

GURU

.07

CONTRAST. DETAIL. CLARITY. Have it all.

SERIES 5000™ ED APO



“THE COLOR CORRECTION OF THE NEW MEADE ED APO STANDS UP TO REFRACTORS THAT COST THOUSANDS OF DOLLARS MORE. DOLLAR FOR DOLLAR, THESE ARE AMAZING SCOPES.”

— Jack Newton, world-renowned Astrophotographer



FOR CRISP WIDE-FIELD OBSERVING AND IMAGING, FEW OPTICAL DESIGNS MATCH THE PERFORMANCE OF A TRUE TRIPLE-ELEMENT APOCHROMATIC REFRACTOR. THIS IS ESPECIALLY TRUE IN ASTROPHOTOGRAPHY. THANKS TO A TWO-YEAR DESIGN PROCESS AND A TRIPLE OBJECTIVE LENS MADE FROM THE HIGHEST QUALITY ED (EXTRA-LOW DISPERSION) GLASS, MEADE SERIES 5000™ ED APO TRIPLETS COMPETE HEAD-TO-HEAD WITH THE WORLD’S PREMIUM APOs AT A FRACTION OF THE COST.

EXPERT OBSERVERS WILL BE DELIGHTED BY THE VIRTUAL ABSENCE OF COLOR FRINGING AROUND OBJECTS AND THE SCOPE’S TEXTBOOK-PERFECT PINPOINT STAR IMAGES. EVEN BEGINNERS WILL NOTICE THE EXTRA HIGH CONTRAST AND BREATHTAKING RESOLUTION OF A SERIES 5000 ED APO. EACH SCOPE IS AVAILABLE AS A STAND-ALONE OTA IN TWO MODELS: STANDARD OR DELUXE. THE DELUXE MODEL INCLUDES OUR NEW SERIES 5000 2" ENHANCED DIAGONAL WITH A 99% REFLECTIVITY MIRROR AND AN ALUMINIUM HARD CARRYING CASE.

A SERIES 5000 ED APO IS THE IDEAL COMPANION FOR YOUR LARGER SCHMIDT-CASSEGRAIN, RITCHEY-CHRÉTIEN, OR NEWTONIAN SCOPE. WHEN PIGGYBACKED, A SERIES 5000 ED APO IS THE PERFECT GUIDE SCOPE THAT DOUBLES AS AN IDEAL WIDE-FIELD PHOTOGRAPHY SCOPE WHEN GUIDED BY THE PRIMARY INSTRUMENT. IT ALSO MAKES AN IDEAL LIGHTWEIGHT AND PORTABLE SCOPE FOR FLAWLESS FIELD OBSERVING.

WE ANTICIPATE THAT OVER THE NEXT SEVERAL YEARS THESE SCOPES WILL PRODUCE SOME THE WORLD’S BEST WIDE-FIELD ASTROPHOTOGRAPHS.

**PREMIUM ED GLASS.** For unsurpassed color correction, brightness, clarity. Expensive FCD1 ED Glass. This Extra-low Dispersion (ED) glass causes all three primary spectral colors to meet at the same focal point for textbook-perfect views. Virtually eliminates chromatic aberration.

**TRUE ED APOCHROMATIC TRIPLET.** A true triplet optical design guarantees the textbook color correction you should expect from a premium APO.

**FAST FOCAL RATIO.** At f/6 (80mm) and f/7.5 (127mm), the focal ratio of these scopes is tailor-made for wide-field astrophotography.

**AIR-SPACED OBJECTIVE LENS.** The precision air-spaced triple element ED objective lens focuses red, green, and blue wave lengths to the same exact focal point.

**FULLY-MULTICOATED LENSES.** Meade broadband multicoated lenses ensure maximum light transmission.

**MACHINED ALUMINUM CRAYFORD FOCUSER.** Superior focuser means smooth and repeatable focusing with no image shift.

**ADJUSTABLE LENS CELL.** Allows collimation of lenses if necessary.

**FULLY-EXTENDABLE DEW SHIELD/SUN SHADE.** An essential accessory included for your convenience.

**MOUNTING BRACKET.** Allows nearly universal mounting on all Meade and non-Meade German equatorial Mounts.

Need a mount? See LXD75 German Equatorial Mount, pg. 32-35.

STANDARD



80MM #1306-00-01

80MM (3.1") APERTURE	127MM (5") APERTURE
3-ELEMENT APOCHROMATIC REFRACTOR	3-ELEMENT APOCHROMATIC REFRACTOR
f/6 FOCAL RATIO (480MM)	f/7.5 FOCAL RATIO (952MM)
EMC SUPER-MULTI COATINGS	EMC SUPER-MULTI COATINGS
6.2 LBS TOTAL NET WEIGHT	15.6 LBS TOTAL NET WEIGHT
15" X 4.9" X 4.9"	33.3" X 6.125" X 6.125"

DELUXE



80MM #1306-00-02

80MM (3.1") APERTURE	127MM (5") APERTURE
3-ELEMENT APOCHROMATIC REFRACTOR	3-ELEMENT APOCHROMATIC REFRACTOR
f/6 FOCAL RATIO (480MM)	f/7.5 FOCAL RATIO (952MM)
SERIES 5000™ ENHANCED 2" DIAGONAL	SERIES 5000™ ENHANCED 2" DIAGONAL
EMC SUPER-MULTI COATINGS	EMC SUPER-MULTI COATINGS
7.2 LBS TOTAL NET WEIGHT	7.8 LBS TOTAL NET WEIGHT
15" X 4.9" X 4.9"	33.3" X 6.125" X 6.125"



127MM #0575-00-01



127MM #0575-00-02



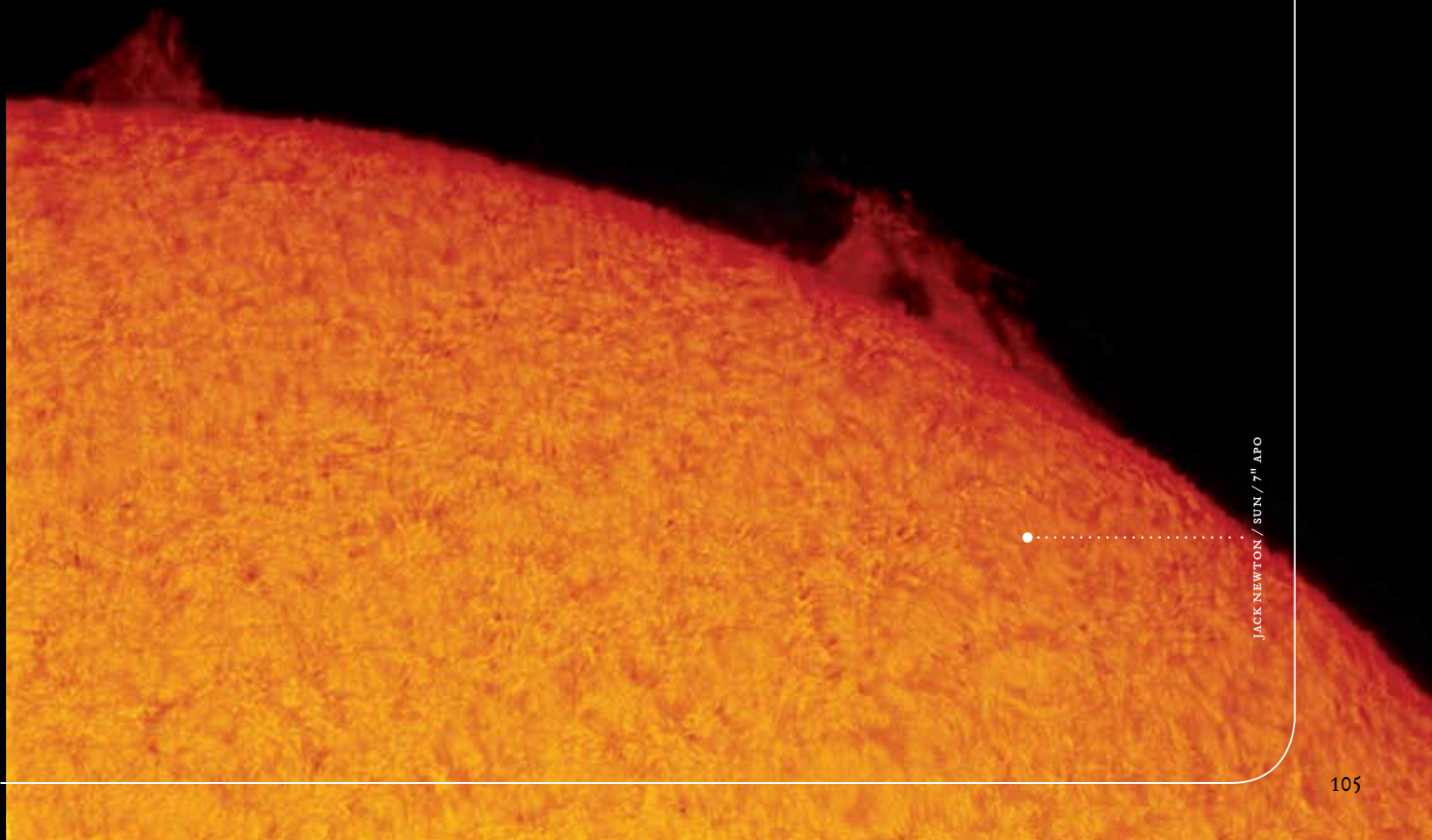
*“Over the years I have done quite a bit of astrophotography of all types and consider the new Series 5000 APO Refractor one of the finest instruments of its type for imaging. The focus is sharp as one would expect from a high-quality triplet and the image color is excellent. If you’re looking for a world-class APO you can afford, you won’t be sorry.”*

—MIKE REYNOLDS / THIRD CONTACT / SERIES 5000 80MM ED APO



MARK SIBOLE / M100 / MEADE 80MM ED APO

MARK SIBOLE / NGC 6960 / MEADE 80MM ED APO



JACK NEWTON / SUN / 7" APO



**“The people of Montserrat had already seen hurricanes, earthquakes and volcanic eruptions. SO I SHOWED THEM JUPITER.”**

—Tippy D’Auria

In 1997, one of seven active volcanoes on the 7x12-mile island of Montserrat suffered a catastrophic eruption. Two thirds of the island’s 20,000 inhabitants fled. The capital city of Plymouth was abandoned. You could walk out of a second story window onto volcanic ash. ✨ As a volcanologist and amateur astronomer, I went with some friends to Montserrat in the spring of 2001 to study the impact of the full moon on volcanic activity. ✨ Knowing we were headed to a place where there had never been a telescope before, I took one along just for fun. At first, it was a mistake. The telescope got me held up in customs because the agent was afraid I would try to sell it. I got through by giving the agent all of my food money as collateral. ✨ I could no longer eat. But I could stargaze. Such were the humble beginnings of the first star party in Montserrat history. ✨ The island’s only radio station (to which everyone listens for volcanic activity reports) ran announcements that some Americans were up on Jack Boy Hill with a telescope. Half the island turned out. Literally.

Boy Scouts. Brownies. Moms and Dads. ✨ Maybe it was the pull of the cosmos. Maybe there was just nowhere else to go. But there was a line in front of that little Meade ETX telescope for five nights straight. Nearly 2500 men, women, and mostly children, waited over an hour to look at planets they had read about in books but had yet to experience. ✨ Of all the sights in astronomy, none is grander than the look on a child’s face when they first see the rings of Saturn. And here’s a little trick of the trade: Never tell a child you’re going to show them Saturn. Instead, let them look in the telescope and say, “what do you see?” You can thank me later. ✨ Since my first look at Saturn’s rings, I have recorded video of mysterious flashes on Mars, photographed dozens of comets and meteor showers, and had an asteroid named in my honor (11378 D’Auria). But the real joy of astronomy is still sharing the wonder with others. While the effect is somewhat less dramatic at home than it was on Jack Boy Hill, my telescope never fails to draw a crowd.





.08  
ECONOMIST  
A and DS-2000  
SERIES



Most avid astronomers trace their passion to a first look at Saturn through a small refractor.

TERRY FULLER: mother of three, piano teacher, DS-2114 owner.

**Level:** *Absolute beginner.*

**Mindset:**

*I don't have a lot of money, but I still want to see the rings of Saturn, explore the lunar surface, stars and clusters, and discover what stargazing is all about.*

**Mantra:**

*Curiosity makes the world go round.*

**Priorities:**

*Price. A positive stargazing experience. A sturdy mount. Quality optics.*

**Goals:**

*Stay on budget.  
Find a quality telescope I can learn and grow with.*

ALSO USED BY: RECRUIT, ENTHUSIAST >>



**Performance:**

*Amazingly crisp views of moon, planets, bright clusters and nebulas.*

**Design:**

*Refractor, Reflector.*

**Strength:**

*Mount and optics designed with passion by Meade engineers in Irvine, CA. Many features from higher priced Meade scopes find their way into the A and DS-2000 series.*

**Buzz:**

*A handful of dedicated amateurs use Meade's DS-2000 series scopes with our Lunar Planetary and Deep Sky imagers to do astrophotography with impressive results.*



.01

RECRUIT



.02

ENTHUSIAST

A-SERIES:  
MANUAL



Meade 70AZ-AR #04043

- 70MM (2.8") APERTURE
- ACHROMATIC REFRACTOR
- ALTAZIMUTH MOUNT
- f/10 FOCAL RATIO (700MM)



Meade 114EQ-ASTR #04066

- 114MM (4.5") APERTURE
- NEWTONIAN REFLECTOR
- EQUATORIAL MOUNT
- f/8.8 FOCAL RATIO (1000MM)

DS-2000 SERIES:  
COMPUTER GUIDED



Deluxe AutoStar #494  
1,400 object database



Meade DS-2080AT-LNT #20085

- 80MM (3.1") APERTURE
- ACHROMATIC REFRACTOR
- ALTAZIMUTH MOUNT
- f/10 FOCAL RATIO (800MM)



Meade DS-2114ATS-LNT #20123

- 114MM (4.5") APERTURE
- NEWTONIAN REFLECTOR
- ALTAZIMUTH MOUNT
- f/8.8 FOCAL RATIO (1000MM)



Meade DS-2130ATS-LNT #20133

- 130MM (5.1") APERTURE
- NEWTONIAN REFLECTOR
- ALTAZIMUTH MOUNT
- f/7.7 FOCAL RATIO (1000MM)

For a full list of specifications go to [www.meade.com](http://www.meade.com)

The universe belongs to everyone.

SHOULD A PERSON HAVE \$1000 TO SPEND BEFORE THEY CAN SEE THE RINGS OF SATURN? NO. FOR MORE THAN 30 YEARS, MEADE HAS MADE TELESCOPES OF ALL LEVELS IN ORDER TO SHARE OUR PASSION WITH AS MANY PEOPLE AS POSSIBLE. OUR A AND DS-2000 SERIES SCOPES MAY COMPETE IN THE \$79-PLUS RANGE, BUT THEY ARE MEADE-ENGINEERED THROUGH AND THROUGH. THEY ARE GREAT FOR FAMILIES, KIDS AND GIFTS. AT THIS PRICE, THE MARKET IS FILLED WITH SUB-STANDARD TELESCOPES. CHOOSE MEADE, AND THE QUALITY, CUSTOMER SERVICE, AND REPUTATION OF THE WORLD'S NUMBER ONE TELESCOPE MANUFACTURER WILL BE THERE TO TURN YOUR CURIOSITY INTO A LIFELONG PASSION.

**What can you see?** Most astronomers trace their love of the night sky to a first look at Saturn through a telescope just like the ones in this section. Any entry-level scope will let you see craters on the Moon, the rings of Saturn, the cloud belts of Jupiter and its moons, plus countless star clusters, double stars, nebulae and more. Remember, low power is best, and the larger the aperture (scope diameter), the brighter those deep sky treasures will appear. The astrophotographs in this catalog do not represent actual views through a telescope. For an explanation, see pg. 57

**Choosing your scope.** For further information on selecting your scope, see the following sections: Optical Systems, pgs. 45-49; AutoStar®, pg. 13; AutoAlign™ with SmartFinder™, pg. 15, and Aperture, pg. 57.

EDWARD ROACH / SATURN / LX90



MARK SIBOLE / MOON / ETX-90



CHUCK REESE / MARS / LX100





## MANUAL TELESCOPES. Basic can be beautiful.

A-SERIES SCOPES ARE OUR MOST BASIC. THESE MANUAL SCOPES LET YOU LEARN THE NIGHT SKY FROM STAR CHARTS AND THE INCLUDED DVD SOFTWARE. MANY OLD-SCHOOL HOBBYISTS STILL FEEL THIS METHOD OF "STAR-HOPPING" IS THE BEST WAY TO LEARN ASTRONOMY.

### Meade 70AZ-AR Altazimuth Refractor.

Economical and perfect for viewing daytime or nighttime objects, this telescope will surprise you with crisp views of the rings of Saturn and much more.

- + **70mm (2.75") Aperture:** Plenty of brightness to reveal planets, clusters, nebulas and more.
- + **Sturdy Altazimuth Mount:** Lightweight and solid aluminum mount and tripod for stable views.
- + **Two Premium 1.25" Plössl Eyepieces:** (25mm and 9mm) Enjoy low and high power viewing with crisp, wide fields-of-view.
- + **Red Dot Viewfinder:** Makes stars and other objects easier to find.
- + **AutoStar Suite™ DVD:** Amazing planetarium software and instructional video will help you learn about the night sky and how to use your telescope. Print out star charts. Plan observing sessions. Displays over 10,000 astronomy targets. Operates on any Windows®-based PC.



### Meade 114EQ-ASTR Equatorial Reflector

Reflectors always provide the most aperture for your dollar. With its full 4.5" of aperture, this affordable telescope will show you deep sky objects in amazing detail. Not for land viewing.

- + **114mm (4.5") Aperture:** Amazing aperture offers brighter views of planets, clusters, nebulas and galaxies.
- + **Sturdy Equatorial Mount:** Lightweight and solid aluminum mount for a stable view. An Equatorial Mount, when properly polar aligned, makes tracking of astronomical objects easy.
- + **2 Premium 1.25" Plössl Eyepieces:** (25mm and 9mm) Enjoy low and high power viewing with crisp, wide fields of view.
- + **Red Dot Viewfinder:** Makes stars and other objects easy to find.
- + **AutoStar Suite™ DVD:** Amazing planetarium software and instructional video will help you learn the night sky and how to use your telescope. Print out star charts. Plan observing sessions. Displays over 10,000 night sky objects. Operates on any Windows®-based PC.



## DS-2000 SERIES TELESCOPES. GoTo capabilities take you there.

DS-2000 SERIES SCOPES ARE FULLY COMPUTER-GUIDED GoTo SCOPES. THEY INCLUDE OUR AUTOSTAR® CONTROLLER (#494) WITH ITS DATABASE OF OVER 1400 OBJECTS. IF YOU WANT AN AFFORDABLE TELESCOPE THAT WILL GIVE YOU A GUIDED TOUR OF THE NIGHT SKY, THE DS-2000 SERIES IS A GREAT PLACE TO START.

### DS-2080AT-LNT 80mm Refractor

The DS-2080 knows the night sky out of the box. Turn it on, and after a brief alignment procedure, your telescope will take you on a guided tour of more than 1400 treasures of the universe. See more objects in one night than Galileo saw in a lifetime. Perfect for land or sky viewing.

- + **80mm (3.1") Aperture:** Plenty of brightness to reveal planets, clusters, nebulas and more.
- + **Sturdy Fork Mount:** Lightweight and solid aluminum mount and tripod for stable views.
- + **#494 AutoStar® Controller:** Automatically locates more than 1400 objects and points the telescope toward them for you at the push of a button.
- + **Series 4000 Super Plössl 1.25" Eyepieces:** (26mm and 9.7mm) Enjoy low and high power viewing with crisp, wide fields of view.
- + **Altazimuth Set-up:** Easy-to-use mount moves up/down, left/right.
- + **SmartFinder™/Red Dot Viewfinder™:** Makes stars and other objects easy to find. Electronic level sensor, north sensor, and precision internal clock help get your scope aligned with the heavens quickly.
- + **AutoStar Suite™ DVD:** Amazing planetarium software and instructional video will help you learn about the night sky and how to use your telescope. Print out star charts. Plan observing sessions. Displays over 10,000 night sky objects. Operates on any Windows®-based PC.



Deluxe AutoStar #494  
1,400 object database



### DS-2114ATS-LNT 114mm Reflector

Like the DS-2080, the DS-2114 knows the night sky out of the box. It can take you on a guided tour of the universe at the push of a button. But with a full 4.5" of aperture, you'll see more surface detail on planets, more cloud structure in nebulas, more stars in clusters, and more brightness everywhere you look. Not for land viewing.

- + **114mm (4.5") Aperture:** Amazing aperture offers brighter views of planets, clusters, nebulas and galaxies.
- + **Sturdy Fork Mount:** Lightweight, solid aluminum mount for a stable view.
- + **#494 AutoStar® Controller:** Automatically locates over 1400 objects and points the telescope toward them for you at the push of a button.
- + **Series 4000™ Super Plössl 1.25" Eyepieces:** (25mm and 9mm) Enjoy low and high power viewing with crisp, wide fields of view.
- + **Altazimuth Set-up:** Easy-to-use mount moves up/down, left/right.
- + **SmartFinder™/Red Dot Viewfinder™:** Makes stars and other objects easy to find. Electronic level sensor, north sensor, and precision internal clock help get your scope aligned with the heavens quickly.
- + **AutoStar Suite™ DVD:** Amazing planetarium software and instructional video will help you learn about the night sky and how to use your telescope. Print out star charts. Plan observing sessions. Displays over 10,000 night sky objects. Operates on any Windows®-based PC.



Deluxe AutoStar #494  
1,400 object database



114 mm  
DS-2114  
Reflector



130 mm  
DS-2130  
Reflector

### DS-2130ATS-LNT 130mm Reflector

With a large 5" of aperture, the DS-2130 has the most light-gathering capability of any scope in this section. It can point to over 1400 objects at the push of a button. And with 5" of aperture, you enter the true realm of the galaxies. See even more surface detail in planets and detect more cloud structure in nebulas. It's an amazing amount of telescope for the money. Not for land viewing.

- + **130mm (5.1") Aperture:** Largest aperture in its family offers brighter views of planets, clusters, nebulas, galaxies and more.
- + **Other specs same as above.**



ASTROPHOTOGRAPHY: JACK NEWTON / M81 - BODES GALAXY & M82 - CIGAR GALAXY / RCX400