

# ASTRO-PHYSICS 2" MAXBRIGHT DIAGONAL (PMDMAX)

The Astro-Physics 2" MaxBright Diagonal was designed with several unique features to provide optimum performance and years of use.

## ***Dielectric Coatings***

The Astro-Physics 2" MaxBright Diagonal has a very high-tech, multi-layer dielectric coating that was developed originally for military optics used in hostile environments such as blowing desert sand. There is no aluminum or other reflective metal used. The reflective surface consists of multiple layers of thin film oxides, similar to those used in anti-reflection coatings. The coatings are deposited using a sophisticated low-stress deposition method.



**Reflectivity** - Reflectivity is above 99% over the entire 4000 to 7000 Å photo-visual range. Thin film coatings have extremely low surface scatter compared to aluminum or enhanced aluminum coatings. Examination with a laser source shows approximately a 5-fold reduction in surface scatter.

**Durability** - The coating is extremely durable compared to metal coatings and can be cleaned repeatedly.

## ***Brass Locking Ring***

The recessed brass ring is under the thumbscrew location. As you tighten the thumbscrew, the brass locking ring clamps onto your eyepiece. This provides a more secure grip for your expensive eyepieces than the head of a single screw can provide. As an added advantage, the brass will not mar the surface of your accessories.

## ***Baffled Flat Black Interior***

Allows maximal light transmission.

## ***Threaded for 48mm Filters***

If you thread your filters directly into the diagonal, you can change eyepieces with ease without changing the filter.

## ***Using Accessories with your MaxBright***

Consider these dimensions to be sure that the barrel of your accessories will not strike the mirror. When using 2" accessories, the depth from the top of the diagonal to the mirror surface is 1.85". When using 1.25" accessories, the depth from the top of the diagonal to the mirror surface is 2.25"; our 1.25" adapter adds another 0.25" height. Remember that if you add filters to your eyepiece barrels, the overall length changes.

## **CLEANING INSTRUCTIONS:**

1. Remove the 4 screws holding the mirror housing to the back of the diagonal. While holding the back in place with your fingers, turn the diagonal around and place the back of the diagonal on the table. Gently lift the top of the housing. Do not remove the mirror from its aluminum back to clean it.
2. Blow any large, loose bits of foreign matter from the surface of the mirror with an air bulb. Stubborn particles can be removed with a soft camel's hair brush.
3. Place a few drops of a mild soap solution or dishwashing liquid diluted with water and wipe in a circular motion toward the outside of the mirror. It is advisable to use soft cotton swabs or white facial tissue and little or no pressure. Although these are hard coatings, hard rubbing can damage them if there are tiny abrasive dirt particles on the glass. Use the cotton swab or tissue for one swipe only and then replace with a fresh one.
4. Follow immediately with a denatured alcohol wetted tissue (removes fingerprints) and a final swipe with an acetone wetted tissue (removes stains). The acetone also leaves the surface in an anti-static state, which will help to prevent dust attraction.
5. Finally, little bits of dust or lint can be blown off with an air bulb.
6. Remember that these coatings are significantly more durable than aluminum, enhanced aluminum or silver coatings, however they are not indestructible. Please use common sense when cleaning.