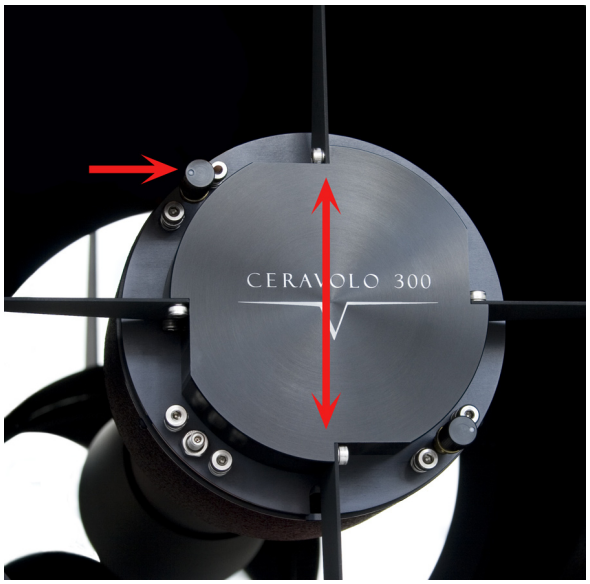
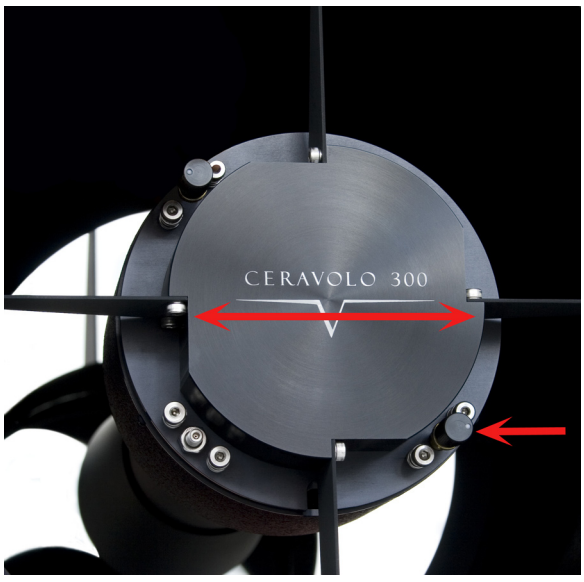
Getting Started

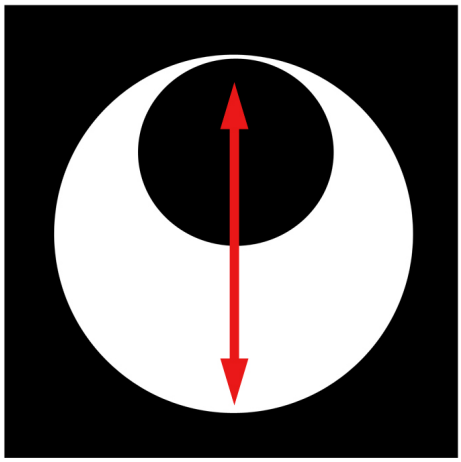
section 1

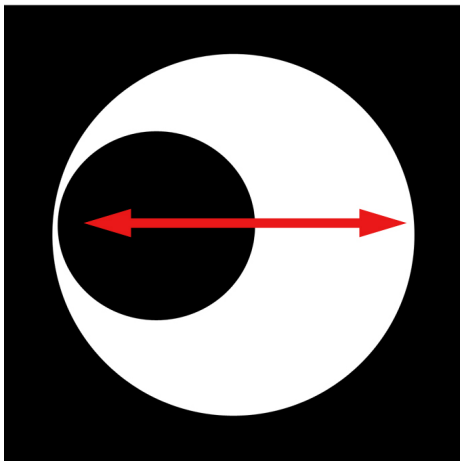
Collimating the Ceravolo 300 astrograph:

Collimation has never been made easier. The optical design of the Ceravolo 300 with an all spherical secondary mirror makes this task simple and easy to finesse in the field. The primary mirror has been pre-aligned and bonded in place and should never be adjusted, only the secondary is tweaked using a simple left/right, up/down orthogonal motion. The two ultra-fine 80 thread per inch thumb screws make precision collimation easy. The thumbscrew near the top tips the mirror up and down and the thumbscrew near the bottom tilts the mirror left /right. It's intuitive and easy!









Getting Started

section 1

Collimating the Ceravolo 300 astrograph:

How to collimate the Ceravolo 300 astrograph

1. Choose a medium bright star, one that won't saturate the CCD chip.
2. Centre the star on the computer monitor.
3. Defocus the star to see the central obscuration in the disk.
4. Tweak the collimation using the thumb screws in an up/down, left/right motion until central obscuration is in the middle of the defocused star.
5. Continue to collimate as you bring the star closer and closer to focus.
6. Once the axial collimation is achieved, focus the camera and take a full field image.
7. Look for round stars in the corners of the image.
8. If the stars are uniformly shaped, the system is working fine.
9. If the stars are not uniform, the camera or filter wheel may not be square/ perpendicular with the optical axis.
10. Contact the camera manufacturer for consultation.

Note:

• Bad seeing can make collimation difficult.

• It is important for all imaging accessories including the filter wheel and camera to be perpendicular to the optical axis of any imaging telescope especially with large format CCD cameras.

• For collimation convenience, line the side of the camera up with the side of the telescope as shown in the photo right.