# Instruction Sheet Laser Collimator

Art.No.: 49-10200

## **Assembly**

Please read the entire instruction sheet before using your Laser Collimator.

The Laser Collimator simplifies the collimation process. Collimation is a method to align your telescope's optics. Your telescope is aligned at the factory, but shipping and handling can sometimes misalign collimation. Misaligned collimation can mean dimmer and blurrier images in your telescope eyepiece. Your instruction manual describes how to collimate your telescope. The Laser Collimator provides a simpler, second method of collimation.

Be aware of the following as you use your Laser Collimator:

Only turn on your laser when you are going to use it. **All lasers** use up battery power very quickly and have short battery life. When you turn on the laser, only turn the "on screw" until the laser turns on. Do not overtighten this screw! Overtightening may damage the collimator.

Note the small "doughnut" attached to your telescope's primary mirror. The doughnut is attached to help you perform alignment with the Laser Collimator. When you insert the Laser Collimator into your eyepiece and turn it on, the pinpoint of laser light will normally be close to or on top of this doughnut. However, if it is any distance away from the doughnut, perform the collimation procedure described in your LightBridge instruction manual before you use the method described below.

DANGER: Invisible laser radiation. Avoid eye or skin exposure to direct or scattered radiation.



### STEP 1:

Remove the eyepiece or eyepiece cap from the telescope.



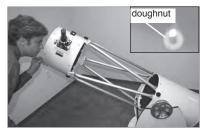
#### STEP 2:

Point the laser downward. Turn the screw on the side of the laser until the laser turns on. Do not overtighten this screw.



## **STEP 3:**

Insert the laser collimator into the eyepie holder. Orient the window on the side of the collimator so that it is pointing towards the bottom of the telescope. Tighten the collimator in place using the eyepiece holder thumbscrew.



## STEP 4:

Standing at the side of the telescope, check out the primary mirror and look for the laser pinpoint. If the laser pinpoint is not near or on the "doughnut" attached to the mirror, remove the laser collimator and use the collimation method described in your LightBridge telescope manual.

If the pinpoint is very near or on the doughnut, proceed to step 5.



#### STEP 5:

Using a Philips head screwdriver, adjust the one, two or all three tilt screws on the secondary mirror holder until the the laser pinpoint is in the center of the doughnut. Notice that when the pinpoint is on top of the doughnut that the pinpoint brightens considerably. When it is in the center, it dims again.



#### STEP 6:

Go to the bottom side of the primary mirror tube and look up at the Laser Collimator. Adjust the one, two or three of the collimation screws on the bottom, until the pinpoint in the window (see Step #3) of the laser collimator is in the center of the window. Note that you will have to loosen one or all of the locking screws to tighten or loosen the collimation screws.











## STEP 7:

Return to the secondary mirror holder and readjust the tilt screws, if necessary, to make sure the pinpoint is centered in the doughnut. Your telescope should now be aligned.



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