

**The Collitron Reticle: View the videos below on youtube: Search: “Denkmeier Collitron Reticle” or input these links into your browser window.**

<https://youtu.be/oIMhUBAcEmg>

<https://youtu.be/I1LCP1pTRSk>

This is a tool that allows you to check alignment indoors. The actual reticle at the end of the unit can be rotated so that the grids are positioned properly. It is very imperative that the grid lines at the 12 o'clock view are matching at the upper top edge of the field in both right and left eyepieces.

- 1.Thread the reticle into the power switch. **If the Filter Switch is installed** on your Binotron 27, you must remove it first. This is done by rotating it off of the Power Switch counter-clockwise. It should thread back on easily and in the correct position. Alternately, the set screws may be backed out a bit to disengage the Filter Switch from the Power Switch. Setting back the Filter Switch in the correct horizontal position will then be required as opposed to removing it the first way described.
- 2.Now with two eyepieces in the Binotron eyepiece holders, view the very top of the field with the right and left eye **separately** and rotate the reticle at the end of the unit. The knurled focuser must be used to focus the grid lines at the top of the field. Ignore the center of the field for now. The ideal setting is the be able to view a line at the very edge of the top of the field with very little space occurring from the field stop of this view.
- 3.Does the right view match the left at the very top/center of the field? View them separately and compare how much space is present form a grid line to the edge of the field at 12 o'clock. Of course make sure that you comparing the same grid line in both fields.
- 4.If not, the lowest silver Collitron Rings of the eyepiece holders must be loosened a small amount. Russ Lederman has collimated the Binotron 27 the highest order and made these lowest silver rings very snug. A tool has been provided with a small post that can be placed in the holes of the silver Collitron Rings and then the ring van be rotated counter-clockwise to loosen it. Note that the post once inserted does not thread into the hole. It is only meant as a lever to “push” the ring counter-clockwise. These rings should only be loosened enough to be able to slide the eyepiece holder in a 360 motion and must not be so loose that the eyepiece holder tilts.
- 5.Once you nudge/slide each holder or only one holder the small amount required (if any), thereafter the silver collitron rings may be finger tightened only.
- 6.If desired, you may now focus sharply on the center of the field to see how easy and comfortable it is to view with both eyes simultaneously.



To Loosen: Insert tool and “push” counter-clockwise.



Focuser

Rotatable Reticle

The methods to check alignment and effect changes can be a bit hard to describe in writing, even though the process is very simple and fast. Please see the two videos on youtube and subscribe to my channel. I build each and every system and collimate the Binotron 27 to the highest order so you may never want or need to align the holders. After collimating older Denk II and Standard Binoviewers for the end user when they lost alignment (many never do!), I wanted to allow the end user of the new Binotron 27 to be able to collimate this instrument themselves if the need ever arose. I tighten the Silver Collitron Rings very firmly so that the end user should really never need to re-align the holders. However, many like having this ability so I implemented it into the design. Once you loosen the tight Collitron Rings, you only need to finger tighten them thereafter The provided “push tool” should only be used once to initially loosen the holders. -Russ Lederman