Make Your Dobson Newtonian Go Virtual

By Jürgen Hilmer - January 2021

Many are Zooming to share during the current crisis. Turn your Dobson Newtonian telescope into a zooming scope. Email and share your images with others. The Dobson Newt with its rocker box mount came around many years ago. To get your Newt to shoot photos of bright night sky objects and to send them to others (like the Moon and some planets) all you need is a 2X Barlow. If fainter objects are the target, an equatorial platform placed under the Dobson Newt rocker box mount can be of help.

The 2X Barlow like a Celestron Ultima, unscrewed, works. Install the optical chrome barrel into a camera (Canon T4i) body cap. Since the optics are closer now to the camera sensor, the Barlow becomes a 3X. The above process makes it possible to focus on night sky objects without rebuilding the inside of the telescope tube. No getting the secondary mirror closer to the primary mirror, or cutting a new hole for the focuser. A scope like a 1500mm f4.5 with a 330mm (13") diameter mirror is an example.

To photograph the fainter objects, which need longer exposure times, an equatorial platform is needed. This platform fits under the rocker box mount. It keeps the target object in the field of view and on the camera sensor for about 30 minutes. After that, pulling on the platform resets it, and it is good for another 30 minutes of tracking. The Osypowski equatorial platform and others are on the used market; kits are sold, and many sites help in building your own.

In a previous <u>article</u> find some helpful information on more scopes, cameras, and sharing images.

Please refer to the following three sites for some of the best information.

- 1. The Barlow Lens
- 2. EQ Platform
- 3. Tom Osypowski Equatorial Platform



2X Barlow Celestron Ultima unscrewed and installed into a camera body cap



Equatorial platform under a Dobson Newtonian type telescope was used



M 42 Nebula 8 seconds at 12800 ISO Canon T4i. Only crop, brightness, and contrast. No Photoshop or stacking.

To sit with and contemplate how huge 13.8 billion light years is, and how tiny Planck time is, and now add a pinch of EPR Entanglement, and all this only known to us for the last 100 years. Ah, how inspiring a Dobson Light Bucket can be!