



The Night Owl .4x reducer is designed to provide high speed and a wider field of view for imaging with a standard Schmidt-Cassegrain telescope (SCT). It is ideal for “electronically-assisted astronomy,” or EAA. The Night Owl is compatible with camera sensors up to 16mm diagonal.

Backfocus

Like all corrector lenses, the nominal backfocus distance from the lens to the camera sensor must be maintained to produce the best image quality. The backfocus of the Night Owl is 38.5mm.



The Night Owl has standard T-threads on the camera side, so you simply need to add the correct length T-thread spacers to adapt most cameras. For example, when using a ZWO cooled camera, which has a backfocus of 17.5mm, you need a 21mm spacer, which is one of the adapters included with the ZWO camera.



Attaching to the Telescope

The Night Owl is housed in a 2" diameter barrel and requires a standard 2" visual back to attach to the telescope. This allows easy use of 2" filters (see below) and rotation of the camera for framing a target.



The Night Owl simply slides into the 2" visual back and is held by a thumbscrew and clamping ring. The position of the reducer lens relative to the telescope is not critical, but sliding the lens in as far as possible will give the nominal .4x reduction factor.



Using Filters

The Night Owl reducer is threaded on the telescope side for standard 2" (48mm) filters. This allows easy use of a light pollution filter, for example.



The available 38.5mm of backfocus will allow the use of some filter wheels or the Starizona Filter Slider for imaging with monochrome cameras.

Specifications

- **Focal Reduction Factor:** 0.4x
- **Maximum Sensor Size:** 16mm diagonal
- **Optics:** 4 elements, fully multi-coated
- **Filter Threads:** M48 (2" filter)
- **Camera Threads:** M42 (T-threads)
- **Backfocus:** 38.5mm
- **Diameter:** 2"
- **Overall Length:** 1.8"
- **Weight:** 0.5 lbs.