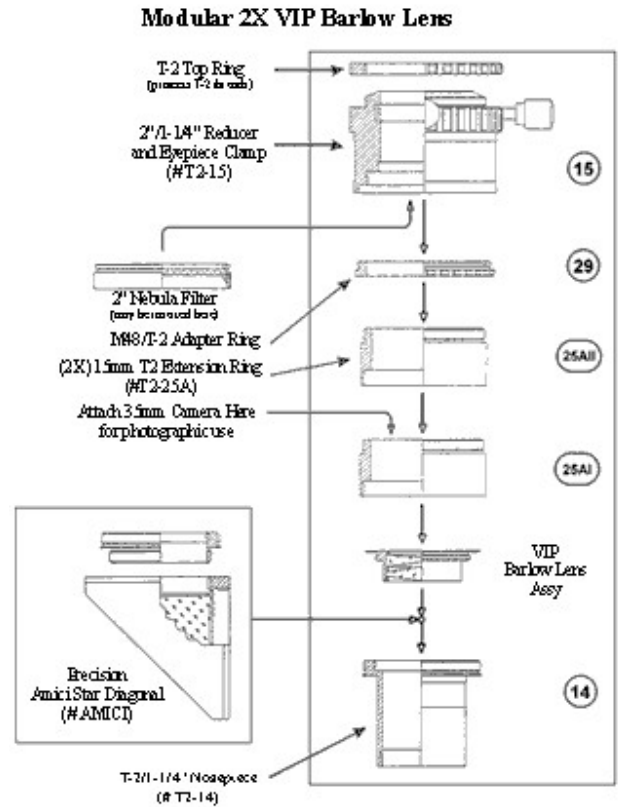


Please refer to the *VIP Modular Barlow Schematic* (shown at right) for a visual overview of all the modular pieces that make up the VIP Modular Barlow system. This schematic is used as a reference for much of the following information.

◆ **Configurations**

One of the distinguishing features of the VIP Modular Barlow is its construction from multiple interchangeable parts. The structural building blocks of the barlow interconnect using standard T-2 (42mm) threading, enabling you to easily configure the system for multiple uses. These components are shown in the schematic (at right), and are individually detailed in [Eyepiece Adapters, Rings](#).

The nominal multiplication factor of the barlow is 2X, based on a 68mm distance from the barlow lens (flange top surface) to eyepiece field stop or film focal plane. As supplied, the VIP barlow provides this nominal distance at the top surface of the eyepiece holder (#15).



*VIP Modular Barlow Schematic*

◆ **Filtration**

The VIP barlow accepts both 1 1/4" and 2" filters, giving you the maximum flexibility to incorporate filtration for visual or photographic use. The T-2/1 1/4" nosepiece barrel is threaded for standard 1 1/4" filters, and the 2" / 1 1/4" reducer (#15) is threaded to accept 2" filters (see the schematic for details). Please note: we have found variations amongst threading used by filter manufacturers, and filter fitup may vary depending on filter manufacturer (we have found some Lumicon and older University filters that fit snugly, or fully thread on but continue to spin even though fully and safely seated due to short threads and large thread reliefs).

### ◆ *Visual Use with the [Precision Amici Diagonal](#)*

As shown in the *VIP Modular Barlow Schematic*, the barlow can be combined directly with our Amici Star Diagonal, giving you a neatly integrated 2X package. Simply thread the barlow lens cell (#4C) into the top of the diagonal, and attach the remainder of the barlow body pieces to the star diagonal as shown. If needed, the T-2/1¼" nosepiece (#14) can be used as the star diagonal's nosepiece.

### ◆ *CCD Imaging*

The VIP Modular Barlow makes an ideal companion to CCD cameras. Its large clear diameter will illuminate even the largest CCD detectors, and its apochromatic field flattening design will maintain the image quality of your primary optics. The modularity of the VIP barlow system makes it easy to position the lens at the correct distance for a 2X amplification factor. For example, with an SBIG ST7/8/9/10 series camera, the distance from the detector to front T-threaded mounting surface is 0.920" (23.4mm) (data from SBIG). In order to set the nominal 2X distance (68mm), you would use a total of three 15mm extension tubes (#25A) in between the 1.25" nosepiece (#14 on the schematic) and CCD camera (i.e. you would need to acquire one additional 15mm extension tube, since two are already included as part of the VIP Barlow). Or, you could include a T-2 Changer System in place of one of the 15mm extension tubes (the changer is also 15mm thick), and permit rapid removal and replacement of the camera or parfocal focusing eyepiece. See [Eyepiece Adapters, Rings](#) for info. on extension tubes and other useful adapters and couplers.

### ◆ *35mm Photography*

As shown in the *VIP Modular Barlow Schematic*, in order to use the barlow as a 2X photographic amplifier, you simply uncouple the barlow at the first 15mm extension tube (#25A-1) and attach the barlow to your 35mm camera's T-ring. This will result in the proper spacing for a 2X factor.

## Modular 2X VIP Barlow Lens

