

# Focus Positions and Mounting

In this document will be the current focus positions and configurations for cameras and eyepieces on the Phillips Telescope.

## Mounting

Our camera and eyepiece focuser are mounted directly to the telescope rotator and fastened with 4 thumb screws. These screws should be placed ever 3 positions along the bracket.

## Main Camera (SBIG STX16803)

### Balance Position

With the main camera on there are no additional weight needs to achieve balance. Confirm that the back and sides of the telescope looks like the below:



## Focus Position

Our main camera achieves focus just around **12500** counts in the Maestro4.

## Focuser (FeatherTouch)

### Balance Position

The Phillips is considered balanced for Focuser/Eyepiece viewing when the six ~2lb weights are installed three on either side. They are labeled and their mounting positions are as well. Below is a picture of their positions.

### Image of Phillips back with eyepiece weights

### Focus Positions

The focuser with most of the time be used with just eyepieces but, on occasion, other instruments and cameras may want to be installed. As such this section provides guidance on as many of these options as possible.

### Eyepieces

The Focuser achieves focus at **12,500** counts in Maestro4. That position was selected so focus is right at the middle of travel on the FeatherTouch focuser using a TeleVue 41mm eyepiece.

***NOTE: Focus is only achieved at 12,500 when both the diagonal AND rotator ring are attached***

### DSLR

To use a DSLR (Canon, Nikon, Sony) can be attached with their respective adapters with a few focuser changes. First, the Eyepiece and Diagonal must be removed. NOT the rotating thingy, just the diagonal. Once that is removed change the focus position to ~~~ counts and you should be very close to focus.

### Planetary Camera (ZWO with ADC)

To use a Planetary camera, specifically our ZWO ASI183MC with ADC, remove the diagonal from the telescope (just like with a DSLR) and attach directly using the 2in adapter that is already mounted to the Planetary Camera. The camera will focus around ~~~ counts.

# Other

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