Focus Positions and Mounting

In this document will be the current focus positions and configurations for cameras and eyepieces on the Schulman 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 AC4040BSI)

Balance Position

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

Image of Schulman back with camera

Focus Position

Our main camera achieves focus just around **32000** counts in Maestro4.

Focuser (FeatherTouch)

Balance Position

The focuser is considered balanced when the two \sim 5lbs weights are mounted on either side of the rotator. They are each marked and labelled and can be seen below:

Image of Schulman 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 uses no spacers (reconfigurable spacers that is) from the mounting point and achieves focus at **70,000** counts in Maestro4. That position was selected so focus is right at the middle of travel on the FeatherTouch focuser using a TeleVue 31mm eyepiece.

NOTE: Focus is only achieved at 70,000 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 $\sim \sim \sim$ 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 $\sim \sim \sim$ counts.

Other

