



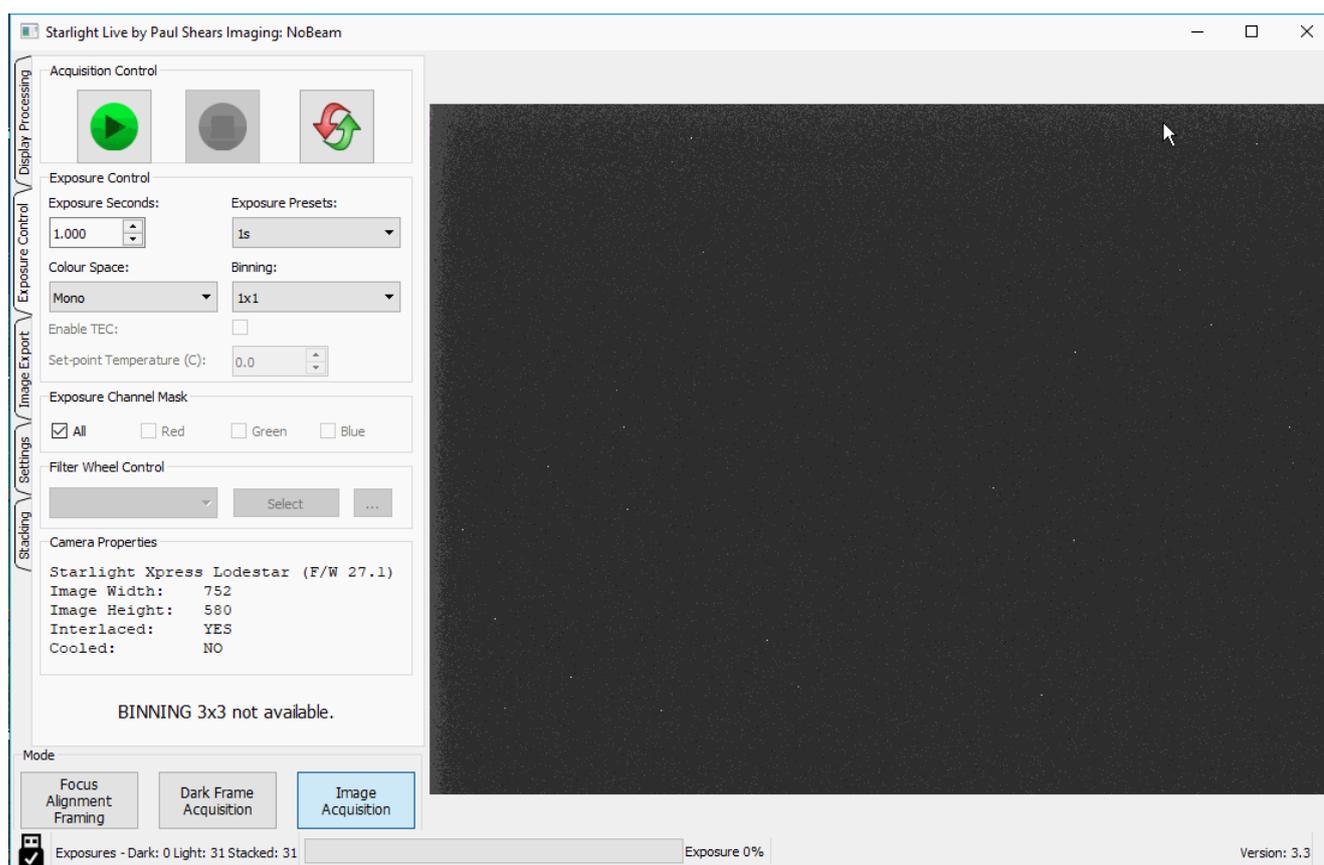
StarlightLive-3.3 for the Slim CCD Lodestar Camera

Starlight Live automatically collects a series of FITS images and sums them if required. The 16-bit images can be opened with [ImageJ](#) to remove noisy pixels and de-interlace.

- Download and install the [Starlight Live](#) camera capture application.
- For Macintosh systems, use the [OSX version](#) of Starlight Live.
- Launch Starlight Live to automatically connect to the Lodestar/Ultrastar camera. Connection is indicated by a tick at the bottom left
- There are 5 tabs on the left to allow various settings and image display

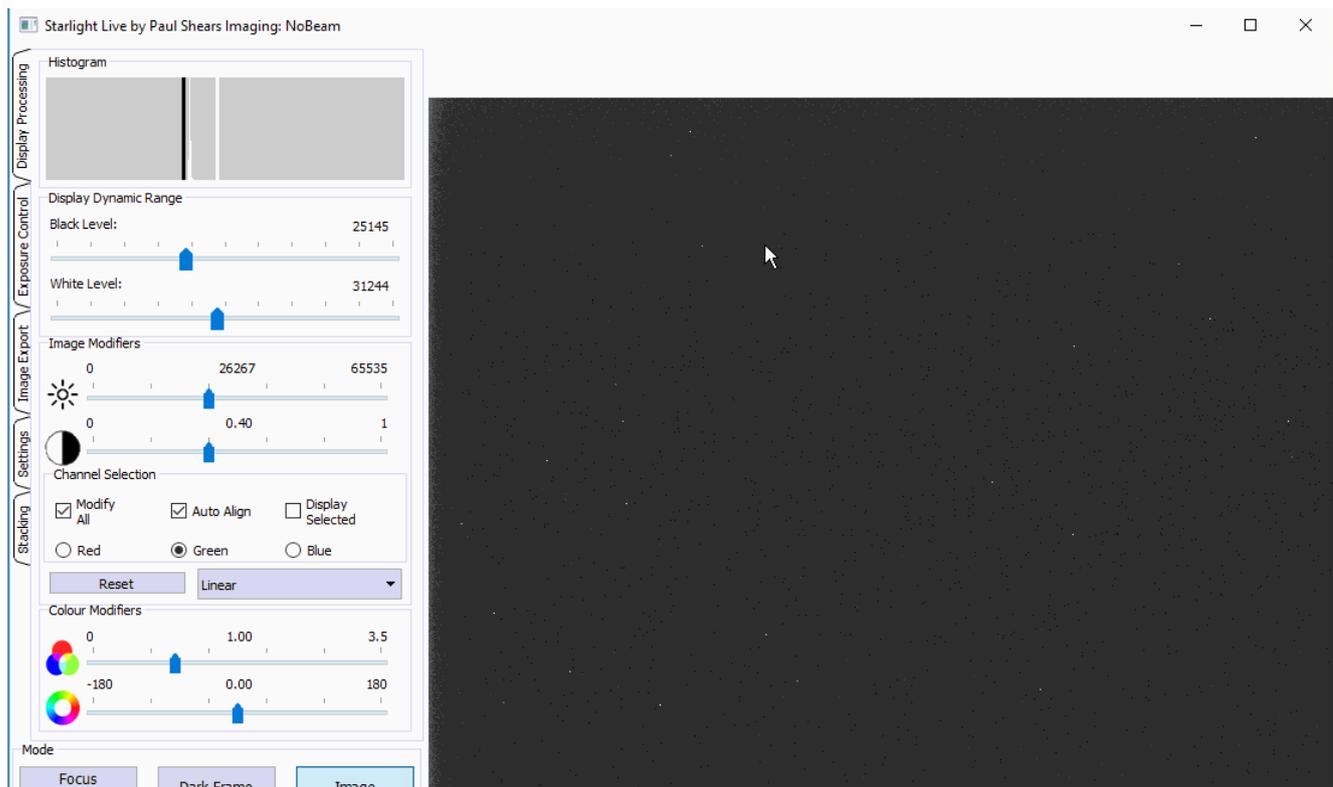
The Exposure Tab

- The green button starts exposures, the red button stops, and the red/green arrows reset
- First set the Exposure Seconds or use Presets for a Mono camera with selected Binning
- The Lodestar has no temperature control, and normally you will use Image Acquisition mode
- Progress and the number of exposures, stacked (summed) or not is shown on the bottom bar



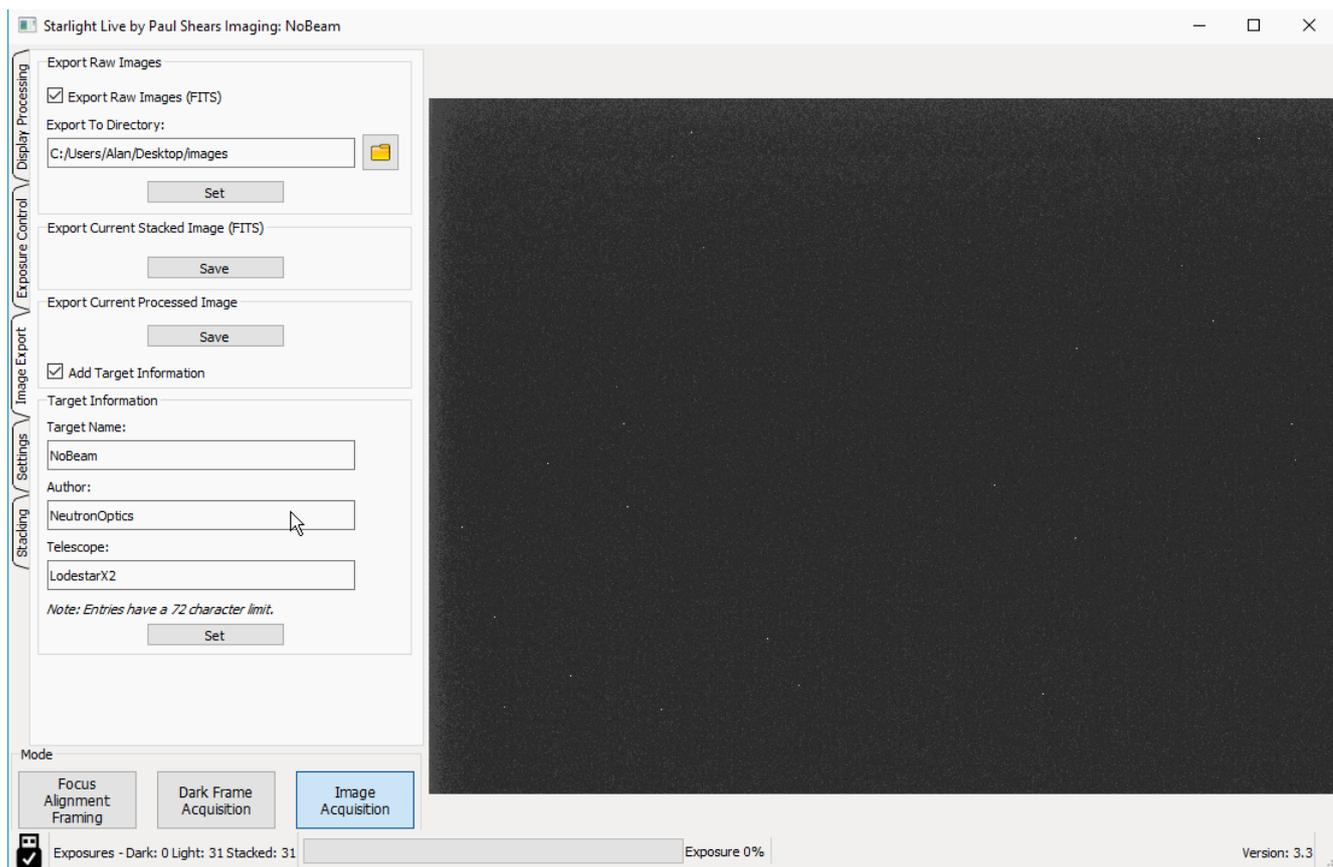
The Display Tab

- Set the Image Modifiers Intensity and Contrast mid-course
- Bracket the white intensity Histogram with the Black and White Levels
- Channel Selection and Colour Modifiers are irrelevant for this mono camera



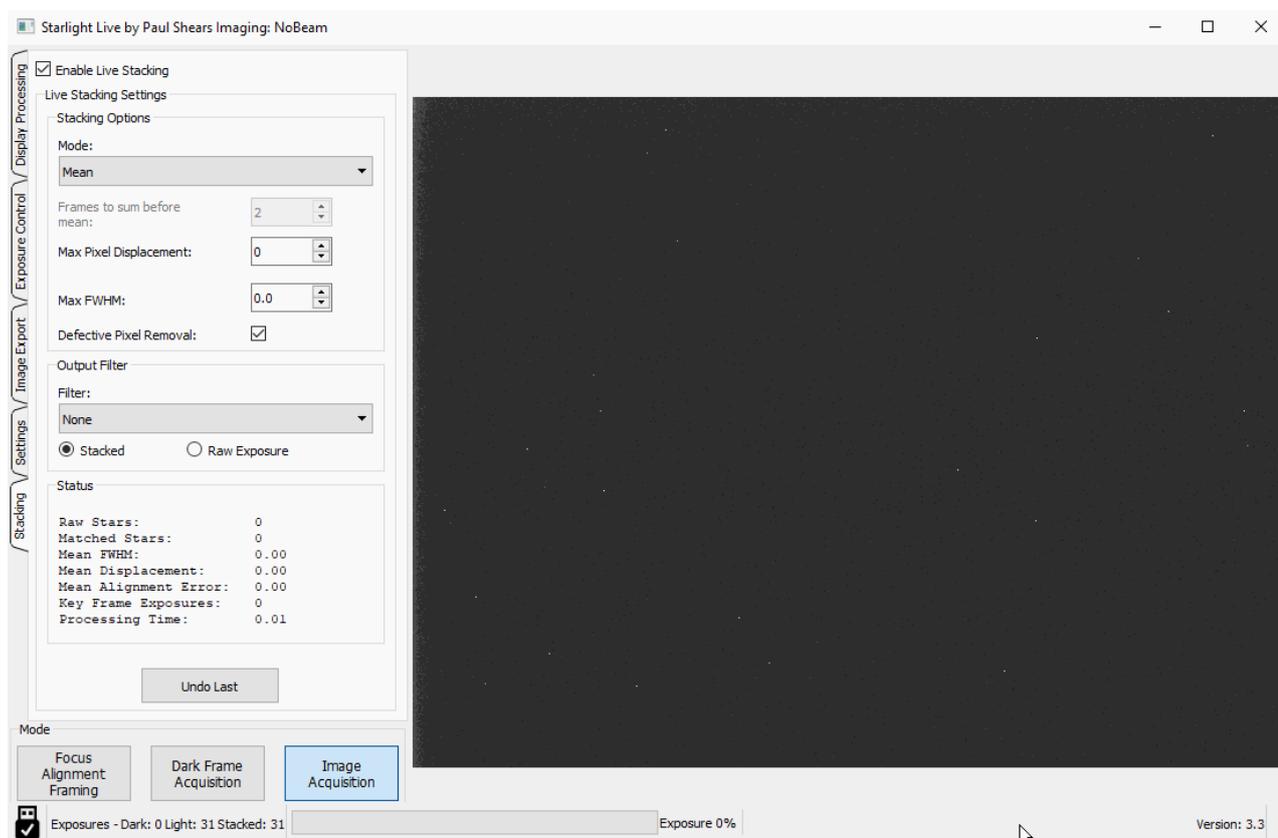
The Export Tab

- You can choose to automatically Export Raw 16-bit FITS Images to a folder
- You can also manually Export Current Stacked Image (or the Processed Image)
- Finally you can add Target Information about the exposure and conditions



The Stacking Tab

- You can Enable Live Stacking so that repeated exposures are summed or averaged
- IMPORTANT ! Set the Max Pixel Displacement and Max FWHM to ZERO (0)
- Defective Pixel Removal doesn't remove noisy pixels and don't use a smoothing Filter



The Settings Tab

- You probably want to choose Fast Display, since this has no effect on saved images
- You may want to Flip the display to correspond with your sample orientation

