

# Gain & Offset Setting for QHY8

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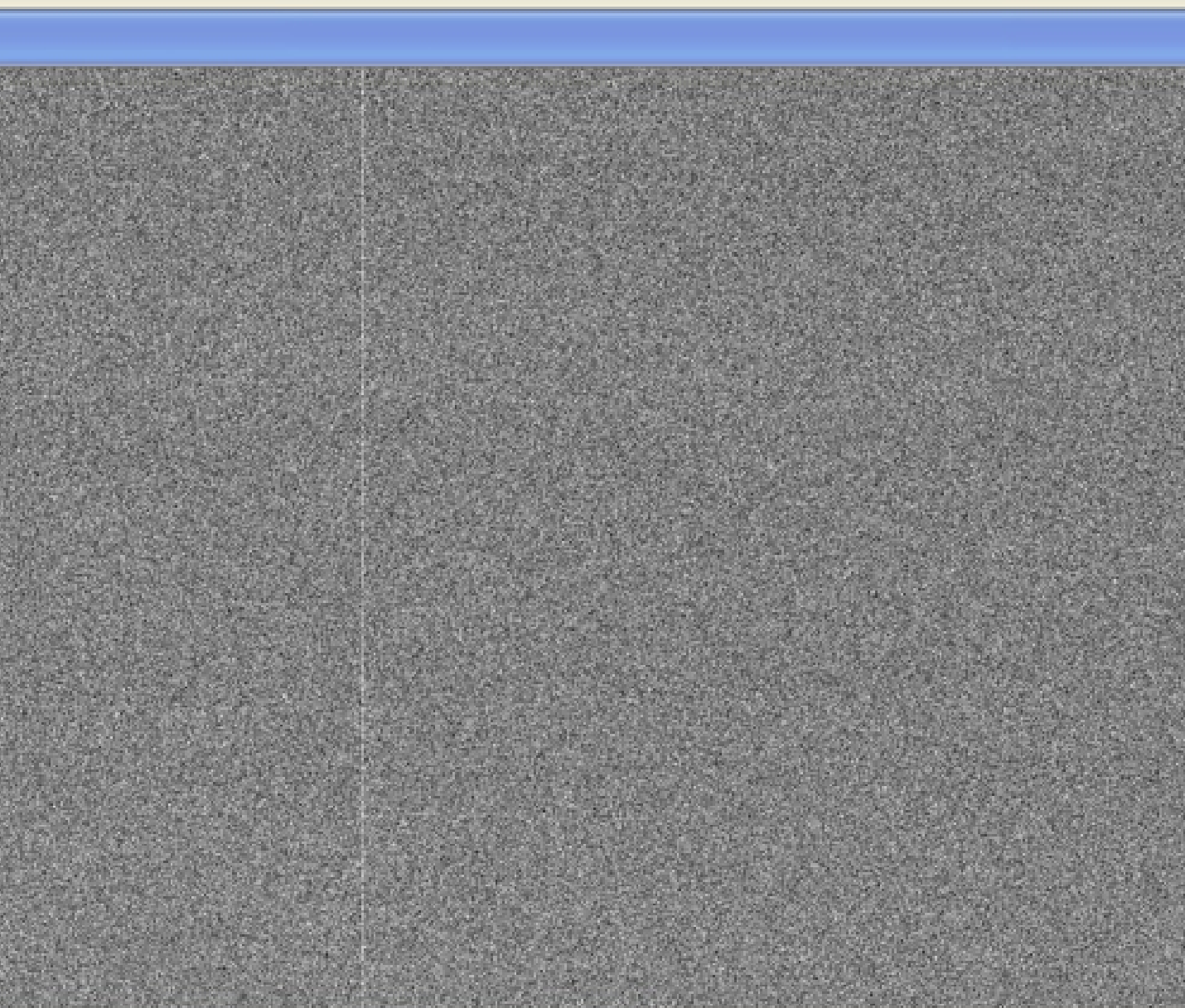
# Finding Offset/Gain

- \* 1st: connect CCD (QHY8) to your PC (Software usually used to take your images) and start cooling.
- \* 2nd: wait min. 30min, between set your gain and offset you always use or, set gain to 50 and offset to 125
- \* 3rd: Your CCD camera must be covered the hole time, or best for cooling put your CCD at your telescope. (The same way taking an image but **cover your telescope**)
- \* After 30min, better 60min start the following procedure!

# Settings and Results

- \* After you have connected your ccd and cooling is at the best, start with.
- \* Take an **Bias Frame** (Bias means= shortest exposing time with QHY8/ Maxim user 0,01sec.) **Dont take a darkframe!** Bias is a setting inside Maxim DL (below light in the exposing tab).
- \* If you have a problem with that settings take an normal image, **BUT THE TELESCOPE MUST BE COVERED**, the hole time! Exposing time as short as possible!!! (QHY8 / Alccd6c = 0,01s)
- \* When the image have been downloaded to your PC, you should have an image that look like ( see next page!) - (download speed LOW!

# Bias (Expo 0,0 1s) GRAY Background!!



**Screen Stretch**

Minimum: 176.43      Maximum: 406.77

Manual [v]      Update >>

**Information**

Cursor	
Pixel	Magnitude
Maximum	Intensity
Minimum	SNR
Median	
Average	Bgd Avg
Std Dev	Bgd Dev
Centroid	
FWHM	Flatness

Mode: Aperture [v]       Display in Arcsec      Calibrate >>

# If your image is black

- \* You have to change your Offset (maybe put 5 to the number you have set be for. (125 be for, try 130 maybe!))
- \* After you have changed Offset take another image (or bias frame without DARKFRAME!) If your image is still black, put again 5 counts to your Offset setting.  
When you have reach max pixel value around 400 to 1000 this step is done.
- \* That means for the final lightframe  
WHY? If the result is black you have to expose a long time, that your background is above zero and you will cut off informations that are weak.

# Results

- \* If my little help was o.k. so HAVE FUN !!!
- \* NB.: The Bias Frame or the shortest image you take (QHY8 / Alccd6c = 0,0 1s) must be gary NOT Black!
- \* CS, Christoph : [www.lightstorm.at](http://www.lightstorm.at)