

CCDSOFT 5 Quick Start for Physics 157 CCD Image Processing Lab

The following guide will give you step by step instructions to get you up and running with CCDSOFT. Please do not change any settings other than the ones specified but feel free to experiment with image exposure times, filter types etc. when taking images.

Camera Setup

On the menu bar under Camera/Setup you'll see the window in figure 1. This window will give you access to the two functions you'll be using for this lab: *Camera Setup* and *Take Image*. Under *Camera Setup* the following settings should already be selected as shown in Figure 1 but if not make sure to set them to the following:

Camera: SBIG ST-9E/9XE
Filter Wheel: SBIG CFW-8
Imager Radio Button is selected

Click the Connect button. After a few seconds the imager Linked box should say "Yes."

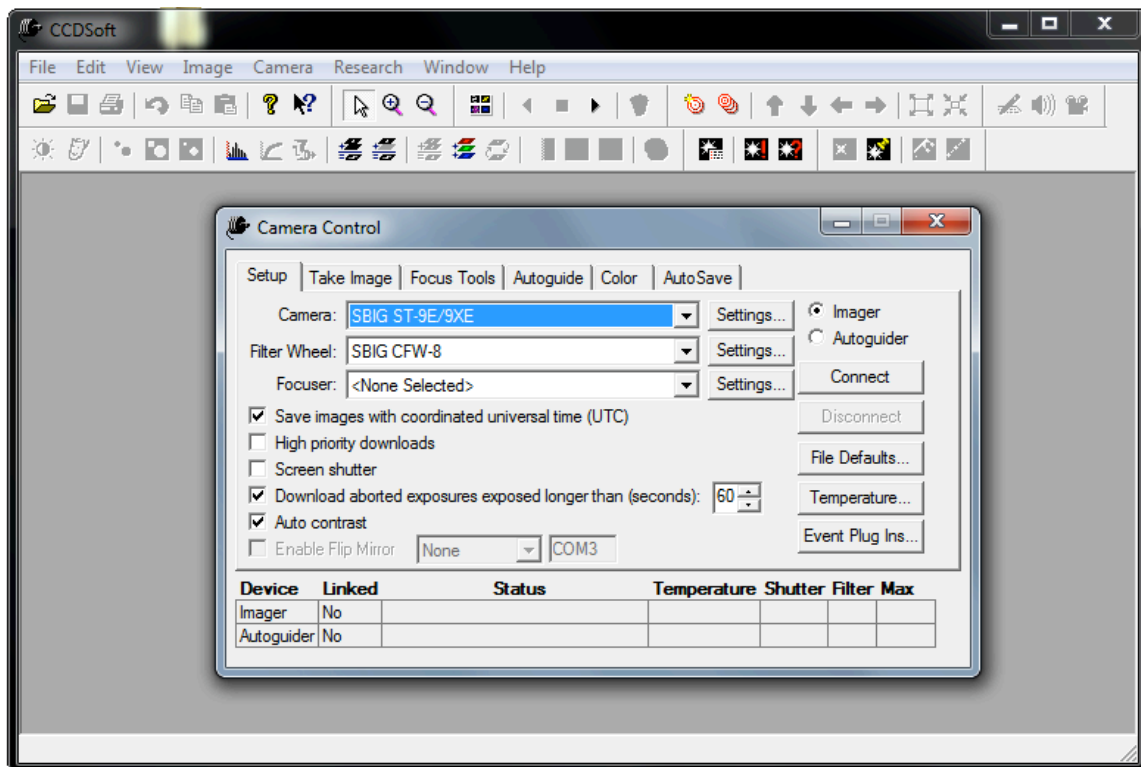


Figure 1: CCDSOFT 5 Camera Setup Window

Taking Images

Figure 2 shows the *Take Image Window*, this is where you'll be spending most of your time in this lab and while observing. As shown you can change camera exposure times, reduction methods and filters. You can also set up the camera to automatically take a series of images. You can use the *AutoSave* Tab to enter file prefixes etc. for these series. Choose prefix names that are descriptive (bias, flat, object).

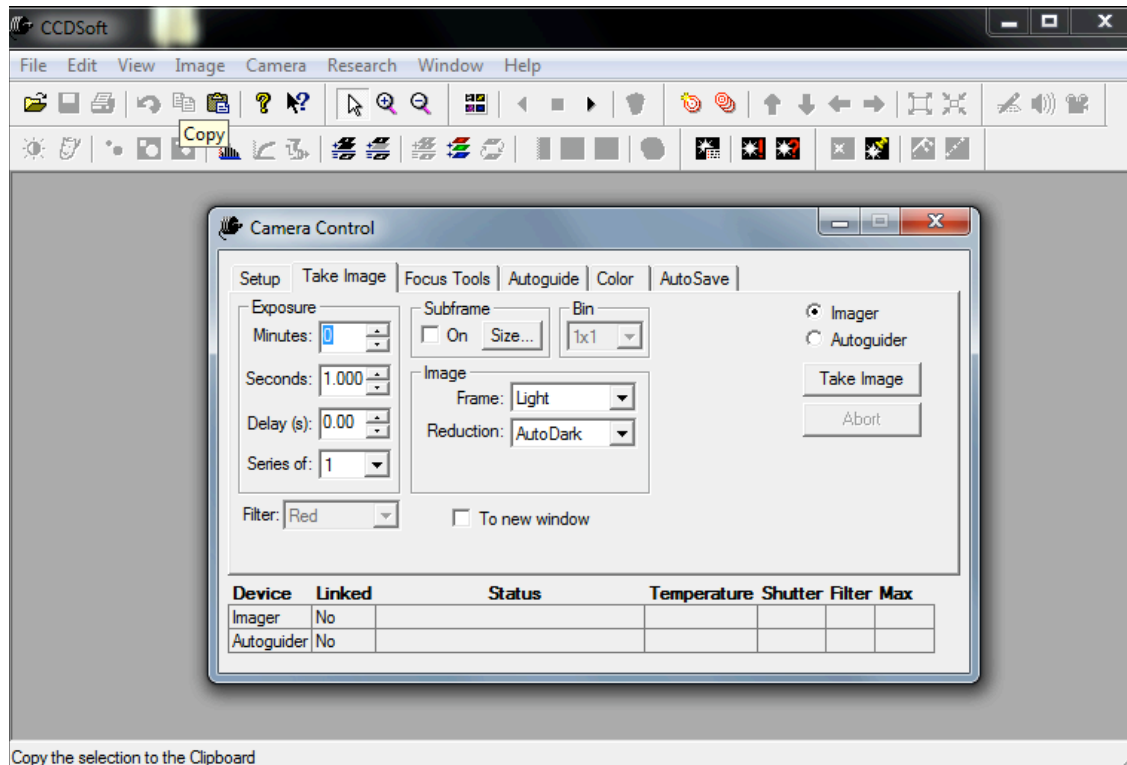


Figure 2: CCDSOFT 5 Take Image Window

Once you take an image it should pop up behind the window, click on it to view. If saving to a file, make sure to save the image as a .FITS file so you can view it in DS9 where you can change many of the image attributes. The DS9 visualization package should be on your computer.