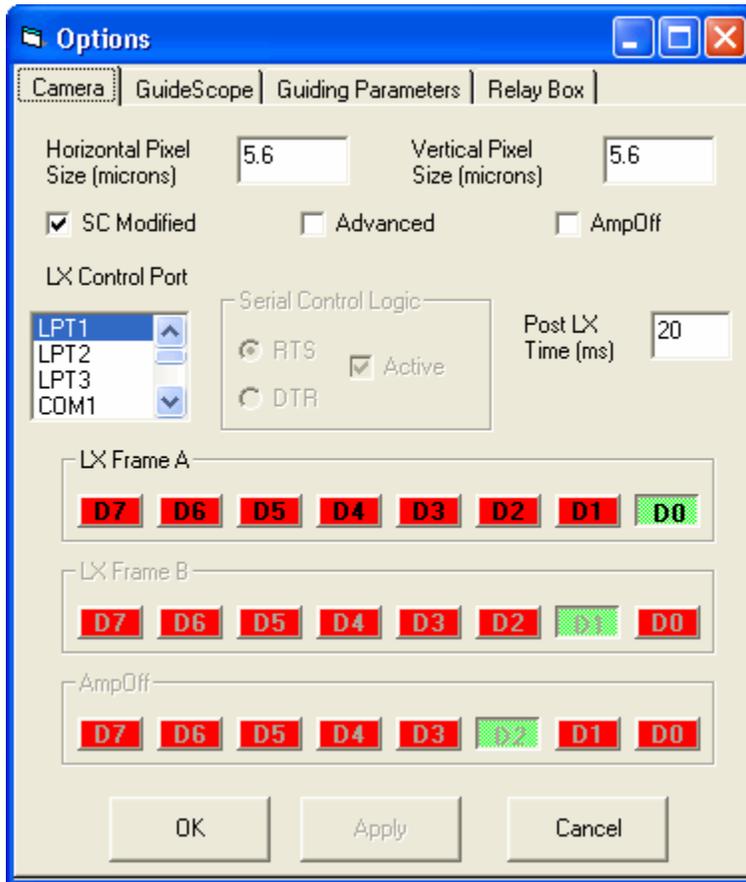


GuideDog Quick Start Guide

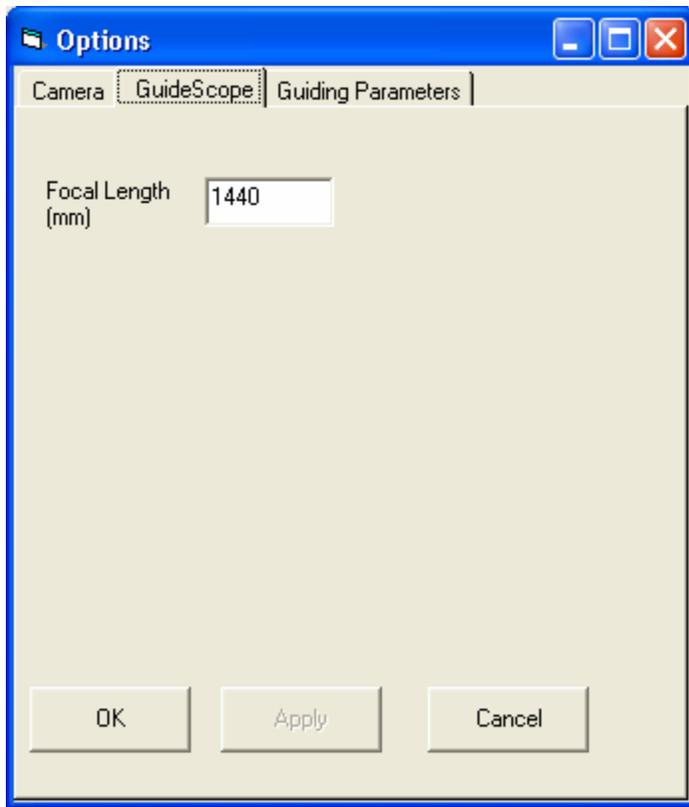
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Connect the webcam and telescope to your computer and launch the GuideDog program.
Select the Options menu and the following screen will appear:

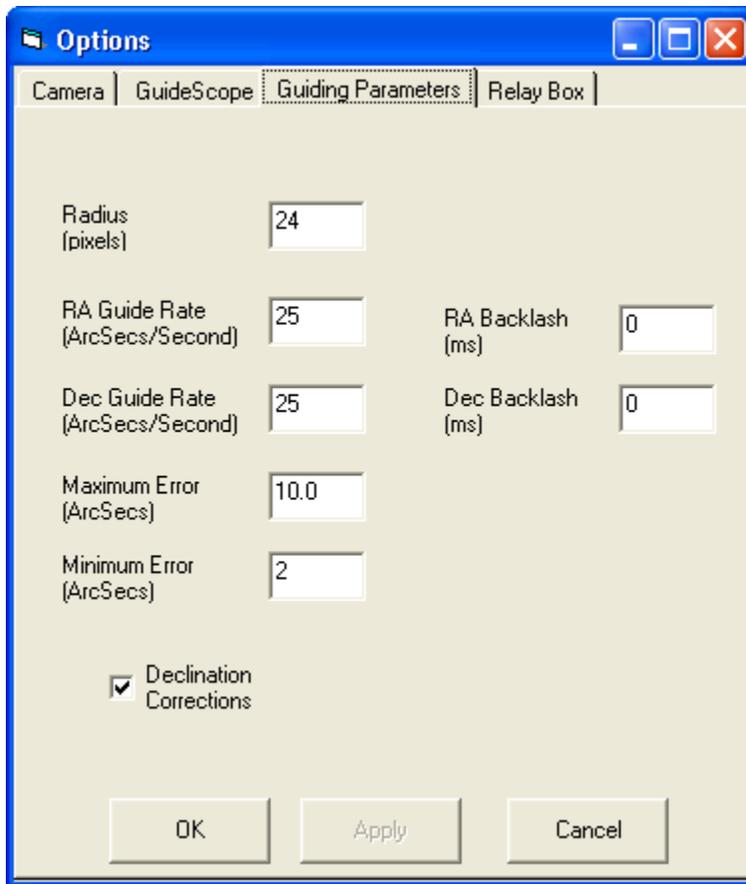


Enter the horizontal and vertical pixel size of your camera (in microns). The default of 5.6 is correct for the Philips line of webcams (Vesta and Toucam). If your camera is SC modified for long exposures, Check the SC Modified box and also indicate if the camera has the Advanced or AmpOff mods. Select the correct control port, either parallel or serial. For parallel port controlled cameras, select the correct parallel port pin for each option enabled.

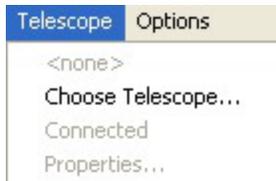
Once the camera options have been entered, click the Apply button and select the GuideScope Tab.



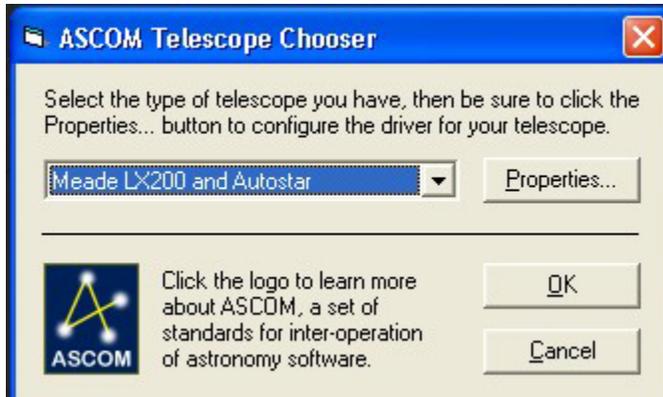
Enter the focal length (in mm) for your guidescope, being sure to take into account any barlow or reducers attached to the image train. Press the Apply button and select the Guiding Parameters Tab.



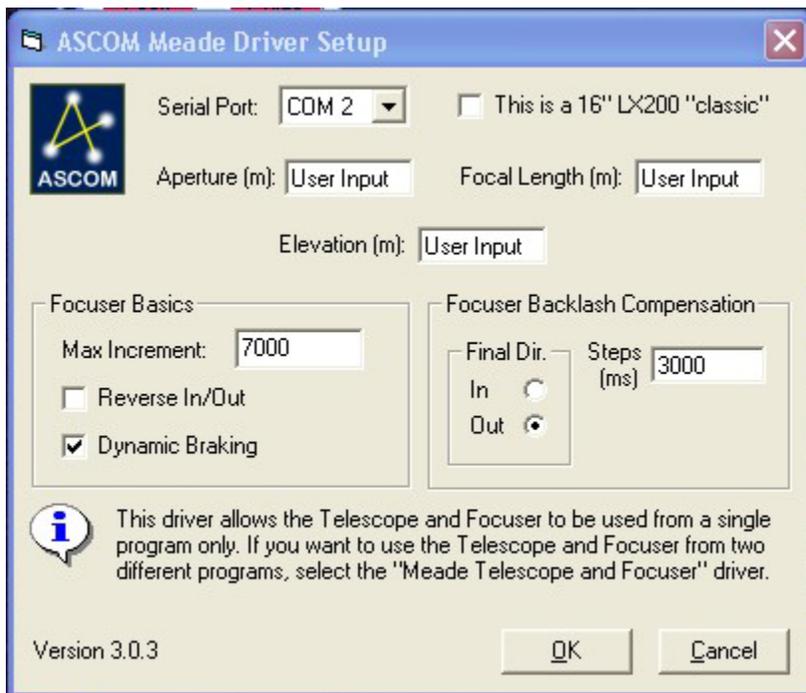
Enter your mount's RA and Dec guide rates in ArcSeconds per Second. This value is used to calculate how long a guiding correction should be made for a particular error. As an example, the LX200 guiding rate is 2x Sidereal. The Sidereal rate is 15 ArcSeconds/Second so the value would be 30 (the default). If you want GuideDog to make corrections in Dec as well as RA then select the Declinations Corrections checkbox. Click the Apply button and then press OK to close the Options panel.

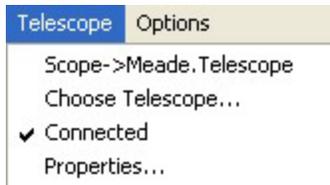


Click the Choose Telescope... option from the Telescope menu to bring up the ASCOM Chooser.

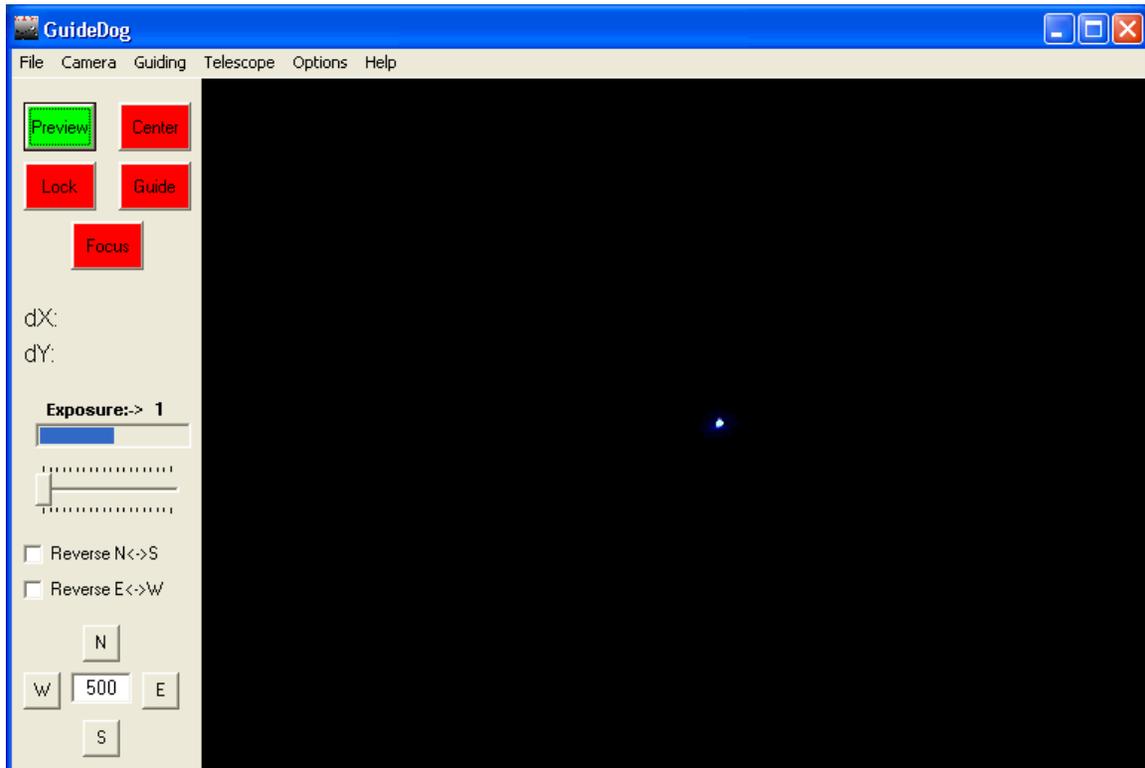


Select you telescope from the menu. The example shows the correct driver for the LX200 or Meade Autostar scopes. After selecting the telescope, press the Properties... button to set the proper COM port for your scope as show below. Press OK to continue.





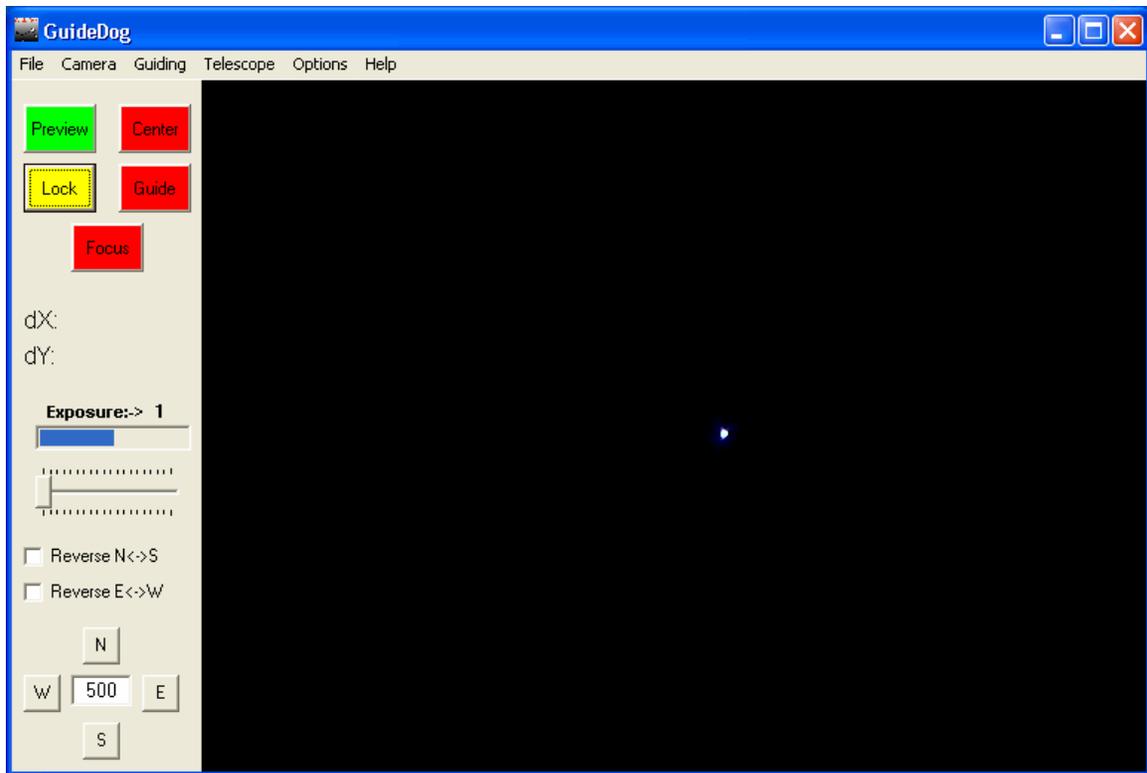
Now the Telescope should be identified, and Connected. In the future, if you use the same scope, the telescope will already be selected. Just press the Connected menu to connect to the scope.



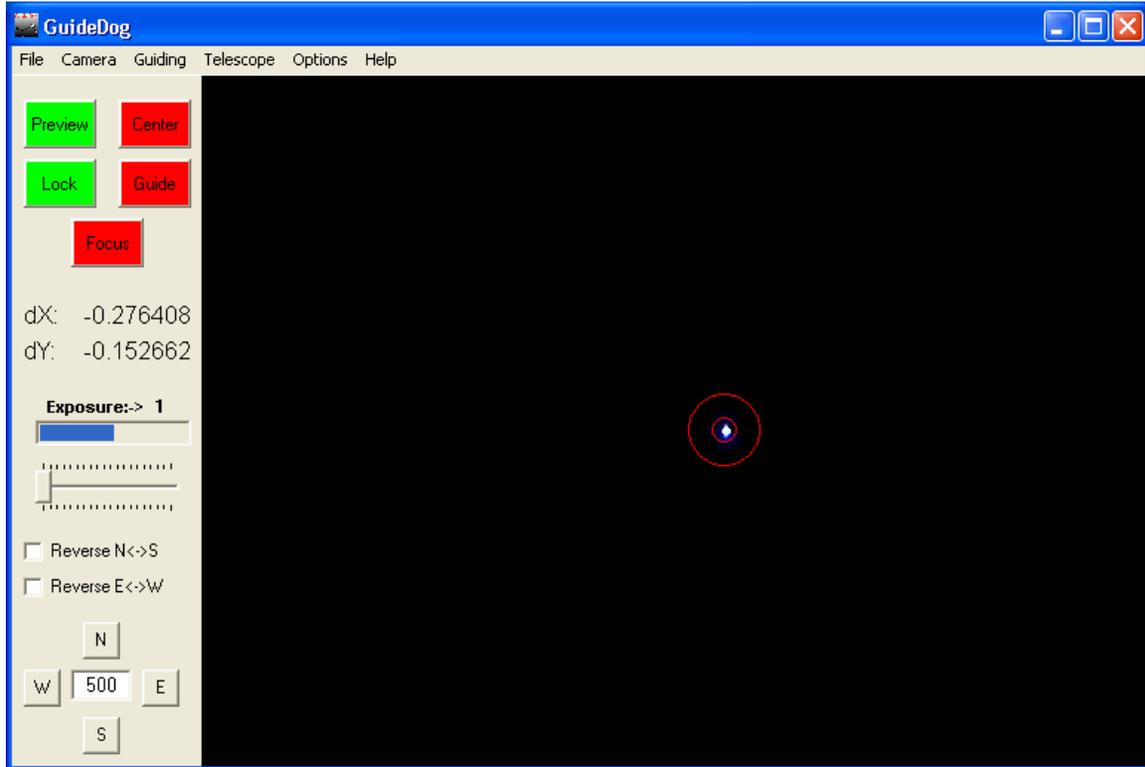
Press the Preview button to start capturing images from the camera. Adjust the exposure time, gain, brightness, etc. until you can identify a star image on the screen. Generally a Gain setting of 50% and an exposure of 1-3 seconds will allow a star to be identified. Notice the star in the upper left corner of the shot above. Generally, if you can make out the star on the screen, it is bright enough to guide on.

It is important to ensure that the camera is oriented correctly for GuideDog to work properly. The camera must be orthogonal to the RA axis, and GuideDog expects that pressing the North button (either on the telescope control paddle or GuideDog Nudge buttons) will move the star image UP. South is DOWN, East is RIGHT, and West is LEFT. Press the East or West button and make sure that the star move horizontally, with out also going up or down. Press the North or South button and make sure the star moves vertically, without also moving left or right. If the camera is rotated so that pressing a button causes the star to move in both axes, then the guiding corrections will not be as effective.

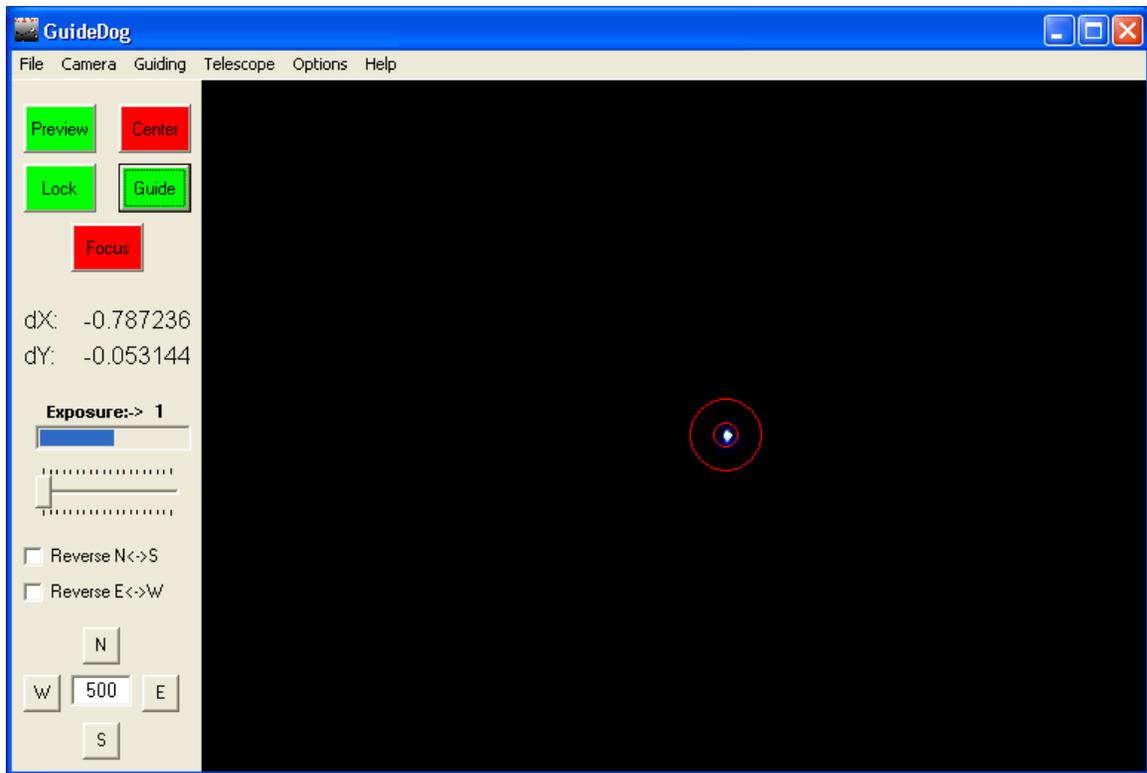
If necessary, check the Reverse N/S or Reverse E/W boxes to make the movements in the directions that are expected. Spend a few minutes to carefully align the camera at the start of your imaging session. Once it is set, you should not have to adjust it for the rest of the evening.



Now that the star has been identified, press the Lock button to establish the star to guide on. Once the Lock button has turned Yellow, click on the star with the left mouse button. It is not necessary to click exactly on the star, just get close as the program's Centroid algorithm will find the star's exact center.



On the next frame after selecting the star, the Lock button should turn Green and a red reticle will appear around the star. This indicates that the program has locked on the star's location. The error labels will start updating on each frame to show the star's drift in RA/DEC from the target location. The labels show the error in Arcseconds.



Now that you've locked on the star, just press the Guide button to begin sending guiding corrections to the mount.