

Application Note
Autoguiding with an ST-402ME
April 13, 2005

The ST-402ME is a low-cost cooled CCD camera that makes a great Autoguider. Compared to other Autoguiders like the ST-4 and STV it has a lot of pixels thus offering a **large field of view**. It also has high Quantum Efficiency and low readout noise for the **best sensitivity**. Finally it has low dark current and an integral electromechanical shutter that **make long dark-subtracted exposures a snap**. While it won't autoguide without a computer like our stand-alone ST-4 and ST-V will, it is in our opinion the most capable (and actually usable) Autoguider available for the money.

Bottom Line:

An ST-402ME will autoguide a 10th magnitude star with a 0.1 second exposure on a 10 inch aperture!

Where can I learn about Autoguiding?

Chapter 3 of the *CCDOps Version 5 Users Guide*, which is available in PDF format from our web site, gives detailed instructions on how to setup your camera and telescope for autoguiding. In addition several Application Notes are available as well. You'll also find the **SBIG User Group**, which you can subscribe to from our web page, is an invaluable resource of like minded CCDers, many of then using the exact same equipment you are.

Autoguiding Software

Every SBIG camera comes with *CCDOps*, SBIG's all-purpose CCD software. In addition to Grab and Focus modes *CCDOps* offers an Autoguide command for turning your SBIG camera into an Autoguider and a Self Guide command for simultaneous guiding and imaging with our Dual CCD cameras like the ST-7. This software is easy to use yet has many advanced features allowing you to get the ultimate in autoguiding performance out of your system.

OpsAG – Autonomous Autoguider

Recently we have introduced our *OpsAG* program which we feel is simply the best autoguiding software available. It allows you to turn your SBIG autoguiding camera and a PC into a autonomous autoguider, working in the background while you use your favorite CCD software for acquiring images with your other camera. For all the details on *OpsAG* open the *CCDOps* help file and look under the *OpsAG* heading. Here are a few screen shots of what's available with *OpsAG* to whet your appetite:

