

#### SANTA BARBARA INSTRUMENT GROUP

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# **Application Note**

Supporting the ST-9E Camera and Images

### Introduction

This Application Note describes the software interface to the ST-9E, both from the standpoint of interfacing to the camera and from reading and writing images. From a software standpoint the ST-9E is an ST-7 with a different detector and a different CPU enumeration value. The camera acts just like an ST-7, with the self guiding, AO-7 and CFW-8 support but contains a KAF0261E, Kodak's latest Blue Enhanced 512x512 CCD with 20 micron square pixels.

### **New Versions of Software**

SBIG has added support of the ST-9E starting with version 2.75 of the Parallel Driver, version 3.85 of CCDOPS for DOS and version 4.12 of CCDOPS for Windows. Make sure you have these versions or later if you're looking for ST-9E support.

### The Parallel Driver

When connected to an ST-9E and you make a call to the Establish Link command in the parallel driver, the driver will return the enumerated value ST9\_CAMERA (10, defined in PARDRV.H) in the cameraType field of the EstablishLinkResults struct. Subsequent calls to the Get CCD Info command will show the pixel sizes, number of pixels, etc. for the ST-9E camera.

### **SBIG ST-9E Images**

When reading or writing SBIG format images the first line of the image header should show:

ST-9 Image

or

## ST-9 Compressed Image

depending on whether the image is uncompressed or compressed, respectively. Note that even though the camera is a E camera (based upon the Blue Enhanced detector) the camera is referred to as an "ST-9" at the driver level and in the image header. This is consistent with the treatment of ST-7E and ST-8E cameras.