Specs

SPOT JR

CCD Grade:	■ Grade 2 Kodak KAF-0400 CCD
CCD Format and Resolution:	■ Optical resolution: 766 x 510 pixels per color plane ■ 1.17 million pixels measured per image Image resoluation: 766 x 510 or 1532 x 1020
Digitization:	■ Pixel-by-pixel digitization in camera head
Image Acquisition Bit Depth:	■ 24 and 36 bit RGB color 8 and 12 bit monochrome (red, green, or blue)
Binning Modes:	■ 2 x 2, 3 x 3, 4 x 4
File Sizes:	■ 766 x 510 / 24 bit RGB = 1.17 MB ■ 766 x 510 / 36 bit RGB = 2.34 MB ■ 1532 x 1020 / 24 bit RGB = 4.68 MB ■ 1532 x 1020 / 36 bit RGB = 9.36 MB
Pixel Readout Rate:	■ 1.08 MHz
Image Capture Time:	■ ~6 sec. to display on monitor (Brightfield image and PII 333 CPU)
Exposure:	■ Choice of auto or manual exposure settings, exposure range 80ms-17 minutes per color
Fast Focus:	■ 5 subframes per second typical
CCD Cooling:	■ Thermoelectric cooler with forced air ■ Cooled to -12°C (37° differential at typical room temperature of 25°C) ■ Temperature stability +/-1°C in 8 hour period
Dark Current:	■ 0.3 e/p/s at -12°C (typical) ■ 0.7 e/p/s at -12°C (max)
Read Noise:	■ 13 e rms (typical) 20 e rms (max)
Signal to Noise Ratio:	■ 75 dB typical at 90% well fill 72 dB minimum at 90% well fill
Operating Environment:	■ 10%-80% relative humidity ■ 15-30°C ambient
Lens Mount:	■ Nikon "F" bayonet mount (adapters available for almost all new and older microscopes) can accept Nikon macro lenses
Power Supply:	■ Factory configurable to 100V, 120V, 220V or 230V, 50/60Hz ■ Dimensions: 5.0"H x 10.5"W x 8.0"D ■ Weight: 12 lbs.
Camera Head:	■ Dimensions: 5.0"H x 7.0"W x 7.25"D ■ Weight: 7 lbs.
Copy Stand Mount:	■ 1/4-20 screw mount

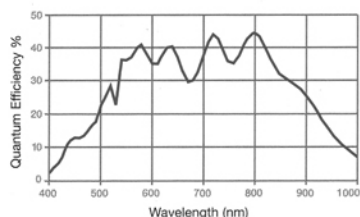|	
Computer Interface:	■ PCI Bus
Software and Operating System:	■ For Windows 95/98/NT Porprietary software enviroment includes: •Auto exposure • Auto white balance • Image database •Report generator • Calibration mark imprinting •Distance, area and angle measurement • Editing tools (histogram, sharpen, gamma, ect.) • Annotation • Flatfield correction • Background subtract • Twain driver • Device driver available for several image analysis programs ■ For Mac Power PC: (Stand-alone due 4th Qtr '98) Twain driver (for use with Adobe Photoshop and other Twain compliant software)
Computer Requirements PC:	■ Pentium required (P166 or faster recommended) ■ 64MB RAM required (128MB recommended) ■ Video card should provide 24 bit RGB "millions of colors" at desired monitor resolution (8MB VRAM required for recommended 21" monitor operating at 1600 x 1200 resolution)
Computer Requirements MAC:	■ Power PC with a PCI bus running MAC OS 7.6 or greater ■ 64MB RAM required (128MB recommended) ■ Video card should provide "millions of colors" at desired monitor resolution (8MB VRAM recommended for resolution of 1280 x 1024)
External Shutter Control:	■ BNC connector on PCI plug-in board; TTL level output for shuttering fluorescence illuminator

Quantum Efficiency of Kodak KAF-0400 CCD

DIAGNOSTIC
instruments, inc.

Phone: 810-731-6000 **Fax:** 810-731-6469
E-mail: info@diaginc.com **Website:** www.diaginc.com
6540 Burroughs • Sterling Heights • MI • USA • 48314-2133