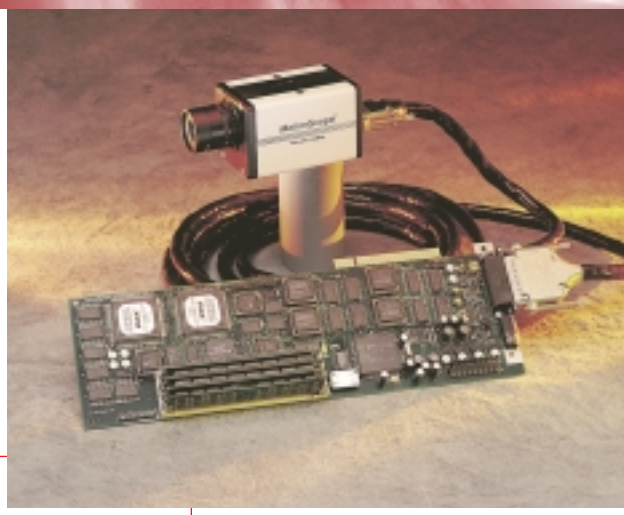
MotionScope®

PCI 500 and 500C



The Redlake MASD *Motion*Scope® PCI system has simplified image acquisition for motion analysis. Designed as a PC peripheral for capturing high-speed digital images directly in the PC, the *Motion*Scope® PCI system consists of a high-speed camera, full size PCI camera control and frame store board (onboard memory), installation and user interface software and documentation. System operation is easy with the "point & click" windows-based application software. Up to four *Motion*Scope® PCI camera systems can be operated in a single PC, providing multiple views of a high-speed event. Record rates range from 60 through 500 frames per second.

*Motion*Scope® PCI cameras can be started or stopped remotely via a handheld switch or from an external trigger signal generated by an optical, acoustic, or electronic sensor (standard 5 volt TTL signal, or up to 30 Volt DC signal). Once captured, the images of the event reside on the Redlake MASD *Motion*Scope® PCI board in the PC until transferred over the computer's PC bus for display and analysis. Playback rates include Single, 1,2,3,4,5,10, 15, 25, 30, 50, 60, 125, 250 and 500 frames per second, forward or reverse. Images are archived in the standard Microsoft .AVI file format. Images can be converted to other image file formats.

Because applications requirements vary widely, *Motion*Scope® PCI systems are available in several configurations. For Customer convenience, Redlake MASD offers an accessory kit that contains all the equipment needed for most applications. A complete selection of lenses, lights, tripods, etc. to handle nearly any situation in nearly any industry is also available.

SNAPSHOT

High-Speed Camera PC Peripheral

The *Motion*Scope® PCI series is a complete easy to install system.

Easy Operation

"Point & Click" operation, learn to operate in minutes

Flexible Trigger Options

Enables record and capture of controlled and intermittent events.

Images in the PC

Makes analysis of images easier, faster and more accurate.

1-800-462-4307

REDLAKE MASD, INC

*Motion*Scope® PCI Series

PCI 500 & PCI 500 C

Performance Specifications

Sensor Array:	658 x 496 pixels with advanced Lateral-Overflow-Drain Antiblooming.
Display Resolutions:	Up to 480 x 420 x 8 bit pixels per frame.
Recording Rates:	50, 60, 125, 250 and 500 frames per second.
Shutter Speed:	Electronic shutter operates at a factor of 1x to 20x of set recording rates. Ranges from 1/50th second to 1/10,000th second.
Recording Mode:	
Manual:	Begins recording when the **record** button is clicked. Continues to record and store images in memory until the **stop** button is clicked.
Trigger:	Begins recording when the **record** button is clicked. Continues to record and store images in memory until an **external trigger signal** is received. The adjustable trigger position (0% - 100%) determines how many frames are stored before and after the trigger signal is received (time zero).
Frame Storage:	
Standard:	Up to 1,024 full-frames.
Memory Upgrade:	Up to 2,048 full-frames.
Enhanced:	Up to 4,096 full-frames.
Maximum:	Up to 8,192 full-frames.
Playback Rates:	Playback mode at 1, 2, 3, 4, 5, 10, 15, 25, 30, 50, 60, 125, 250 and 500 frames per second, forward and reverse. Single step mode, forward and reverse.
Multi-Camera Display:	Application software supports up to 4 PCI cameras in a single PC.
Menu Display:	Mode (Live, Record, Play), Frame #, Time of Frame (in ms), Camera #, Event #, F/Sec. Record, Shutter Speed, Trigger Point, F/Sec. Play, Reticle Distance, Velocity, Data, Load and Save files, Setup, and Help.
Operator Environment:	Point & click environment for Windows 2000 and Windows NT® 4.0 with Service Pack 6
Trigger Input:	Contact Closure, standard TTL signal or up to 30V DC. BNC connector.
Video Out:	RS-170 (NTSC or PAL) output to VCR or external monitor
Phase-Lock:	Multiple PCI camera systems can be synchronized to insure that frame zero is identical on each PCI camera system.
Lens Mount:	Standard C-mount.
Power Requirement:	+5V @ 2 Amps, +12V @ .8 Amp per PCI System. (20 Watts total)
Board Size:	Full size PCI board requires 2 slot spaces to accommodate memory.
Camera Size:	63mm x 63mm x 100mm 0.5 kg
Recommended PC:	Minimum Pentium II with MMX technology, graphic display 1024 x 768 resolution, 128MB RAM, 3+ GB Hard Drive, CDR Drive, ZIP or JAZ Drive, 2 or more PCI slots.

Recording Time (Sec.) / Frame Storage

Record Rate	Sensor Resolution	Standard Memory	Memory Upgrade	Enhanced Memory	Maximum Memory
50	480 x 420	5.1/256	10.2/512	20.5/1024	41.0/2048
50E	240 x 210	20.5/1024	41.0/2048	82.0/4096	163.8/8192
125	480 x 420	2.0/256	4.1/512	8.2/1024	16.4/2048
125E	240 x 210	8.2/1024	16.4/2048	32.8/4096	65.5/8192
250	480 x 420	1.0/256	2.0/512	4.1/1024	8.2/2048
250E	240 x 210	4.1/1024	8.2/2048	16.4/4096	32.8/8192
500	320 x 280	1.0/512	2.0/1024	4.1/2048	8.2/4096
500E	240 x 210	2.0/1024	4.1/2048	8.2/4096	16.4/8192

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Note: Specifications are typical and subject to change. M106-00