# **Motion**Scope

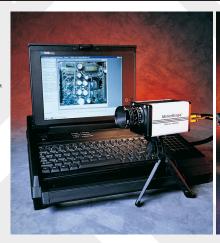
#### **PCI Series**

The Redlake MASD MotionScope 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 MotionScope 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. Record rates range from 60 through 8,000 frames per second, depending on the model.

MotionScope 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 MotionScope 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, 500, 1,000, 2,000, 4,000 and 8,000 frames per second, forward or reverse. Images are archived in the standard

## **Motion**Scope<sup>™</sup>

for imaging excellence when quality counts





#### SNAPSHOT

#### High-Speed Camera PC Peripheral

The MotionScope 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.

Microsoft .AVI file format. Images can be converted to other image file formats.

Because application requirements vary widely,
MotionScope 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.





### **IIIMotion**Scope

#### PERFORMANCE SPECIFICATIONS

**MotionScope PCI Series** PCI 1000 S, PCI 2000 S, PCI 8000 S, PCI 1000 SC and PCI 2000 SC **Image Resolution** Up to 480 x 420 x 8 bit pixels per frame depending on model

**Recording Rates** 60, 125, 250, 500, 1,000, 2,000, 4,000 and 8,000 frames per second depending on model **Shutter Speed** Electronic shutter operates at a factor of 1x to 20x of set recording rates. Ranges from

1/60th seconds to 10 microseconds depending upon frame rate and model

**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

StandardUp to 16,384 frames, depending on modelEnhancedUp to 32,768 frames, depending on modelMaximumUp to 65,536 frames, depending on model

**Playback Rates** Playback mode at 1, 2, 3, 4, 5, 10, 15, 25, 30, 50, 60, 125, 250, 500, 1,000, 2,000, 4,000 and

 $8,\!000\ frames\ per\ second, forward\ and\ reverse.\ Single\ step\ mode, forward\ and\ reverse$ 

**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

4 and 5

**Trigger Input** Standard TTL signal up to 30 Volts DC. BNC connector

Video Out RS-170 (NTSC or PAL compatible) output to VCR or external monitor

**Phase-Lock** Multiple PCI camera systems can be Phase-Locked 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 Systems (20 Watts total) **Board size** Full size PCI board requires 2 slot spaces to accommodate memory

**Camera Size** 2.5" H x 2.5" W x 4" L (63.5 x 63.5 x x101.6mm)

Weight 1.5lbs (.7kg)

PC Minimum Platform Minimum Pentium II with MMX technology, 1024 x 768 display resolution, 128MB DRAM,

3+GB Hard Drive, CD-ROM Drive, 2 or more PCI slots. CD-R, Zip or Jazz drive recommended



Redlake MASD, Inc.

tel: 800.462.4307 tel: 858.481.8182 fax: 858.792.3179

email: sales@redlake.com

www.redlake.com

