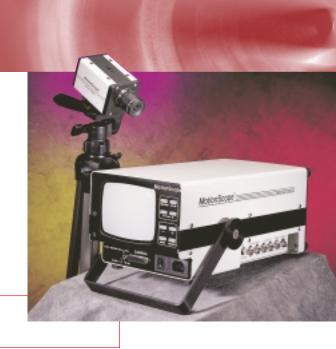
MotionScope

MotionScope® S Series & C Series



The Redlake MASD. *Motion*Scope S series and *Motion*Scope C series of high-speed video cameras are designed to help solve those tough research, engineering and production problems. The portable control/display units are easily handled by one person, while the compact, remote camera head fits into tight, hard-to-reach areas. System operations are intuitive and are controlled by just a few buttons on the front panel. Simple onscreen displays show the system status at a glance.

Record rates range from 60 through 8,000 frames per second, depending on the model. Higher frame rates tend to show greater time resolution detail while lower rates allow longer recording time. Shutter speeds can be independently varied to eliminate blur or to permit lower-light recording.

MotionScope® 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). Images can be quickly reviewed on the built-in monitor or downloaded to a VCR or PC for more detailed analysis.

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

SNAPSHOT

Self-Contained

The *Motion*Scope S & C series control processor features built-in display monitor and easy to use controls.

Portable

The lightweight *Motion*Scope S & C processor (11.6lbs/5.3kg) is ideal for most application environments.

Flexible Trigger Options

Enables record and capture of controlled and intermittent events.

1-800-462-4307



MotionScope

MotionScope S and C Series

Models 1000 S, 2000 S, 8000 S, 1000 SC and 2000 SC

Performance Specifications

Sensor Array: 658 x 496 pixels

Sensor Resolution: Up to 480 x 420 x 8 bit pixels per frames, depending on frame rate.

Recording Rates: (50)*, 60, 125, 250, 500, 1000, 2000, 4000 and 8000 frames per second, depending upon model.

*(Indicates PAL unit).

Shutter Speed: Electronic shutter operates at a factor of 1x to 20x of set recording rates.

Ranges from 1/60th second to 10 microseconds depending upon model.

Recording Modes:

Manual: Begins recording when the **record** button is pushed. Continues to record and store images in memory until the

stop button is pushed again.

External Sync: Begins recording when the record button is pushed. Continues to store images in memory at a rate supplied by an

external signal generator, up to the rate selected on the control panel, as long as a signal is present or until

memory is full.

Trigger: Begins recording when the **record** button is pushed. Continues to record and store images in memory until an

external trigger signal is received. When signal is received, locks-in images up to the trigger point. Continues to record and store new images until remainder of memory is full and then automatically stops. 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 16,384 frames, depending upon model. Enhanced: Up to 32,768 frames, depending upon model. Maximum: Up to 65,536 frames, depending upon model.

Auto playback mode at 1,2,3,4,5,10, (25)*, 30, (50)*, 60, 125, 250, 500, 1000, 2000, 4000 and 8000 frames per

second. Single step mode, forward and reverse. *(Indicates PAL unit).

Video Display:

Playback Rates:

S Series: Built-in 5" monochrome CRT monitor.

Color Series: Built-in 5" color LCD monitor.

Status Menu Display: Mode (Setup/Live, Record, Playback), Frame #, Time of Frame (in ms) and Event #.

Setup Menu Display: F/Sec. Record, Shutter Speed, Trigger Point and F/Sec. Play.

Operator Controls: Menu and Function Select Buttons, Record and Stop Buttons, Playback Direction Buttons.

Remote Operation: RS-232 serial connector allows system control via computer or hand-held keypad.

Trigger Input: Standard 5-volt TTL signal or up to 30 volts DC signal. BNC connector.

Composite Video Out: RS-170 or RS-170A (NTSC or PAL compatible) output to VCR, external monitor or PC via frame grabbers.

BNC connector.

S-VHS Video Out: NTSC or PAL S-VHS output. 4-Pin DIN connector.

Video Loop-Through: Accepts video-in from VCR, etc. for using internal monitor for display or loop through. BNC connectors (2).

Phase-Lock: Units can be phase-locked to ensure that frame "0" is identical on each system.

Allows multiple views of an event. BNC connectors (2).

Lens Mount: Standard C-mount.

Size & Weight: Control/Display Unit: 6" H x 7.5" W x 14.5" L. 11.6 lb. (5.3 kg)

Camera Head: 2.5" H x 2.5" W x 4" L. 1.1 lb. (.5 kg)

Power: 110 VAC, 60 Hz, .5 Amp; 220 VAC, 50 Hz, .25 Amp.

Operating Environment: 0 to 120 degrees F.

1-800-462-4307

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Note: Specifications are typical and subject to change. M108-00

