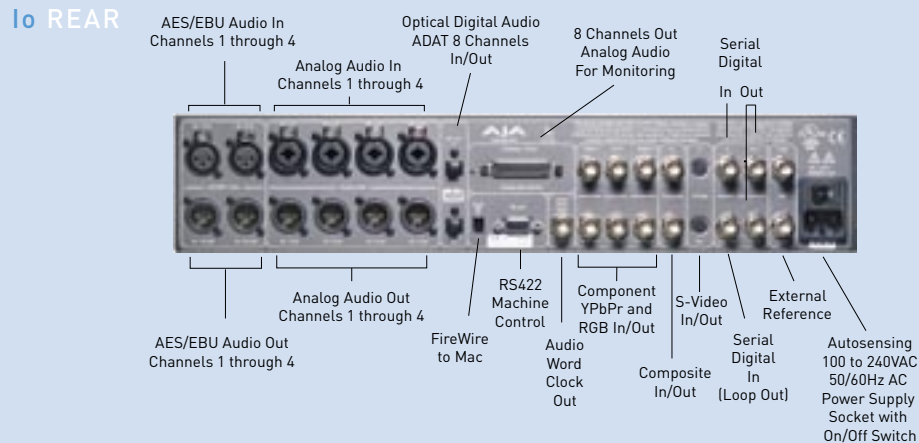
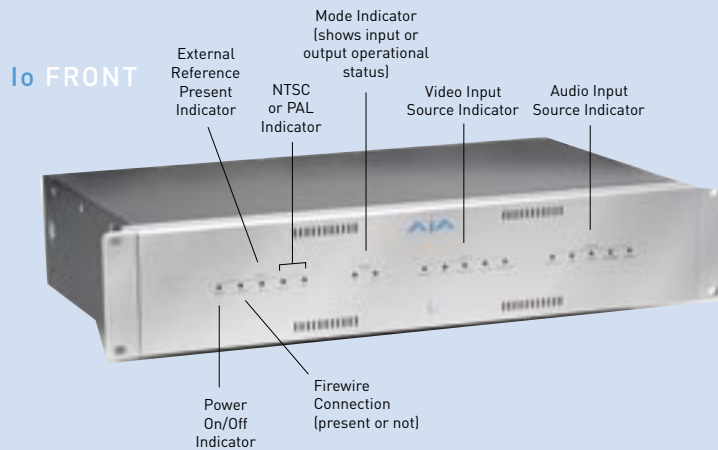


# Io

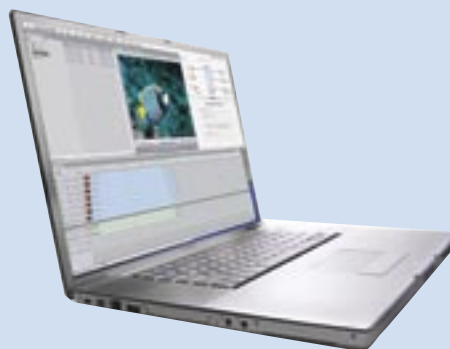


SIMPLE, ELEGANT, REVOLUTIONARY

The Io products are the only  
uncompressed over-firewire devices  
available for Final Cut Studio.™



WHETHER YOU'RE ON A DESKTOP OR LAPTOP...  
 A G4 OR G5... AJA'S Io PROVIDES THE SIMPLE,  
 SEAMLESS SOLUTION TO WORKING  
 WITH FINAL CUT STUDIO™.



## AJA VIDEO'S I<sub>o</sub>

products are the effortless, plug-in solution to working with Final Cut Pro HD on a Macintosh G4, G5, or Power-Book. With a single FireWire connection, any I<sub>o</sub> links to the Power Mac, providing professional audio and video I/O, as well as connectivity to VTRs, Genlock, and integrated with OS X drivers. Quite simply, I<sub>o</sub> products make building a Mac-based video finishing system a piece of cake.

Offering incomparable 10-bit uncompressed video and multi-channel audio, the I<sub>o</sub> is a virtual, versatile powerhouse. Just tap into its flexibility, and you can configure a Power Mac as a professional editing suite, corporate/industrial video center, or high-powered desktop video setup — and just about anything in-between. Both analog and digital ports are offered, allowing connection to just about every kind of video/audio peripheral — from the most current digital decks to old legacy devices.

## I<sub>o</sub> SOFTWARE

All of AJA's I<sub>o</sub> products have been co-developed with Apple for use with Final Cut Pro HD to deliver powerful video/audio capture, editing, and video production — all in a single, integrated system. Each member of the family comes with special Final Cut Pro presets to facilitate ease of use. The I<sub>o</sub> driver also provides RGB support, allowing for the direct video output of applications such as Adobe After Effects,<sup>™</sup> Discreet Combustion<sup>™</sup> and Apple Motion.<sup>™</sup>

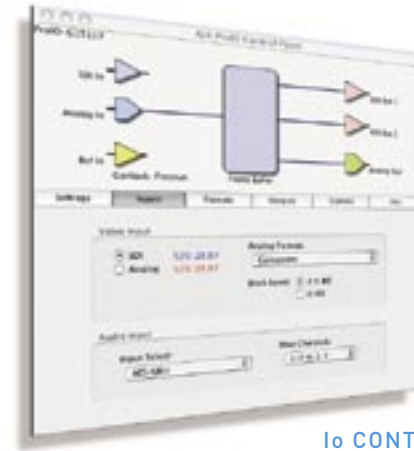
## NEW I<sub>o</sub> CONTROL PANEL

The I<sub>o</sub>'s bells and whistles have been enhanced by a stand-alone Control Panel software application that lets you manage the I<sub>o</sub> as an "everything in/everything out" frame synchronizer. Now, the I<sub>o</sub> can perform as a stand-alone A/D converter, D/A converter, SDI audio mux/de-muxer, and more.

Offering a block diagram view of how the I<sub>o</sub> is currently configured — including source selection — the new Control Panel provides simple, at-a-glance configuration and control capabilities. Flexible software controls allow you to select input sources, choose formats, color correct, and save settings in up to 10 unique presets.

These presets can be recalled at a later time to instantly reconfigure the I<sub>o</sub>. Once a preset is recalled, the I<sub>o</sub> can be disconnected from the Mac's FireWire port and truly operate as a stand-alone converter. When the I<sub>o</sub> is powered off and back on, it will remember the last preset chosen from the Control Panel. For the ultimate in flexibility, you can even have multiple I<sub>o</sub>'s connected to the FireWire bus on a Mac, and use the Control Panel to select the one you manage.

When Final Cut Pro is running, the Control Panel steps aside and automatically lets it take over the I<sub>o</sub>, resuming control again when Final Cut quits. The Control Panel



I<sub>o</sub> CONTROL PANEL

provides a powerful addition to Final Cut's capabilities with features such as proc amp and output timing controls.

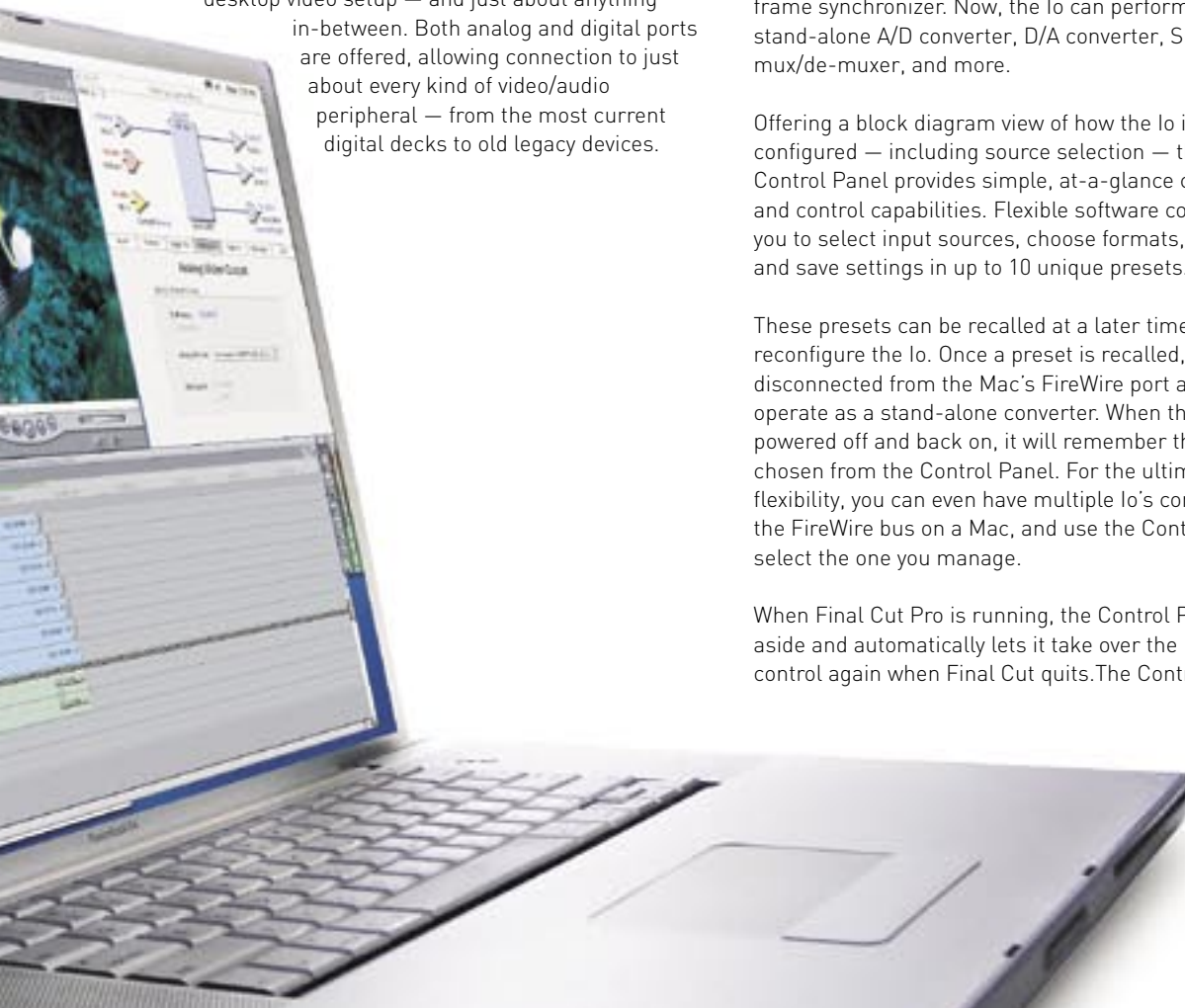
## COST-EFFICIENT OPTION

If you're in the market for a smaller and lower-cost version of AJA's award-winning I<sub>o</sub>, take a look at I<sub>o</sub> LD and I<sub>o</sub> LA:

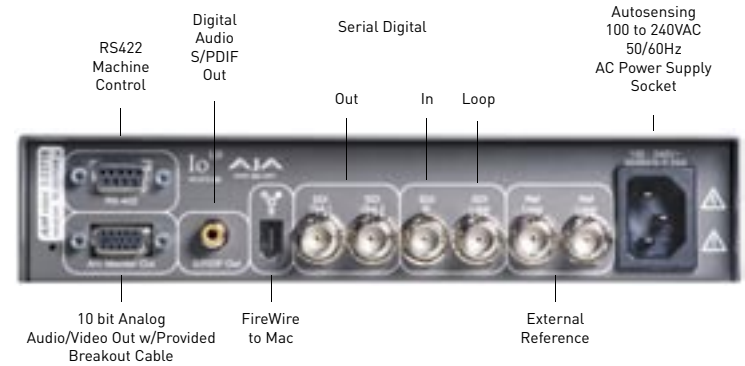
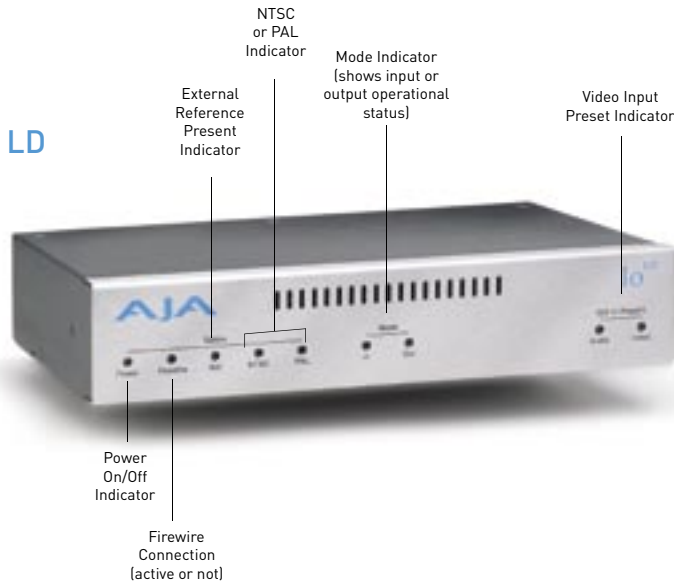
I<sub>o</sub> LD — Designed to work with SDI digital systems, it supports 10-bit uncompressed SDI video and embedded audio I/O, and offers 10-bit analog video, with 2 channel balanced monitoring outputs.

I<sub>o</sub> LA — Created for analog component, composite and S-video systems, it affords the highest quality 10-bit video available on all analog inputs and outputs and 4 channel balanced audio I/O. As stylish-looking as the bigger guys, I<sub>o</sub> LD and I<sub>o</sub> LA can do their stuff when placed directly on a desktop, and can also be rack-mounted through the use of an optional kit.

I<sub>o</sub> I<sub>o</sub><sup>LD</sup> I<sub>o</sub><sup>LA</sup>



## Io LD



## Io SPECIFICATIONS

### VIDEO INPUT

Digital:  
 8 or 10-bit SDI, SMPTE-259  
 Analog:  
 Composite/S-Video: NTSC, NTSCJ, PAL  
 10-bit A/D, 2x oversampling  
 3 line adaptive comb filter decoding  
 +/- .25 db to 5.0 MHz Y Frequency Response  
 +/- .25 db to 1 MHz C Frequency Response  
 .5% 2T pulse response  
 < 1.5% Diff Phase  
 Component: SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB  
 10-bit A/D, 2x oversampling  
 +/- .25 db to 5.5 MHz Y Frequency Response  
 +/- .25 db to 2.5 MHz C Frequency Response  
 .5% 2T pulse response  
 < 2 ns Y/C delay inequity

### VIDEO OUTPUT

Digital:  
 8 or 10-bit SDI, SMPTE-259  
 Analog:  
 Composite/S Video: NTSC, NTSCJ, PAL  
 12-bit D/A, 8x oversampling  
 +/- .2 db to 5 MHz Y Frequency Response  
 +/- .2 db to 1 MHz C Frequency Response  
 .5% 2T pulse response  
 < 1% Diff Phase

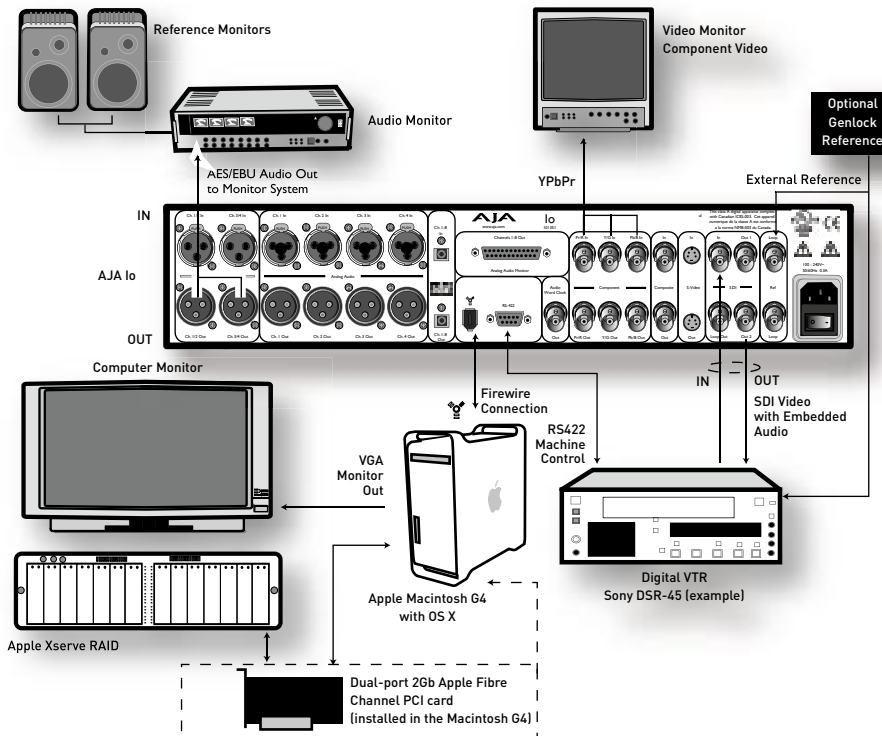
< 1% Diff Gain  
 Component: SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB  
 12-bit D/A, 8x oversampling  
 +/- .2 db to 5.5 MHz Y Frequency Response  
 +/- .2 db to 2.5 MHz C Frequency Response  
 .5% 2T pulse response  
 < 1 ns Y/C delay inequity

### AUDIO INPUT

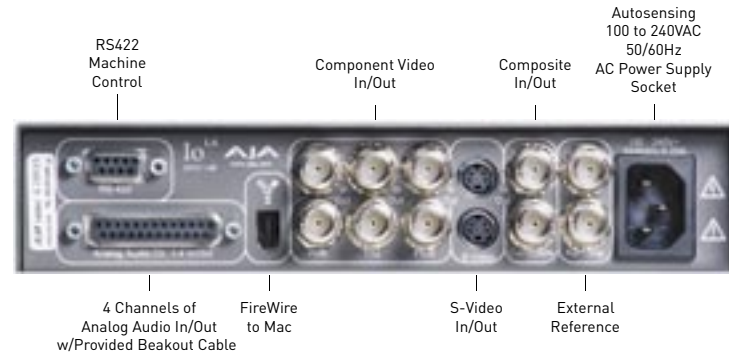
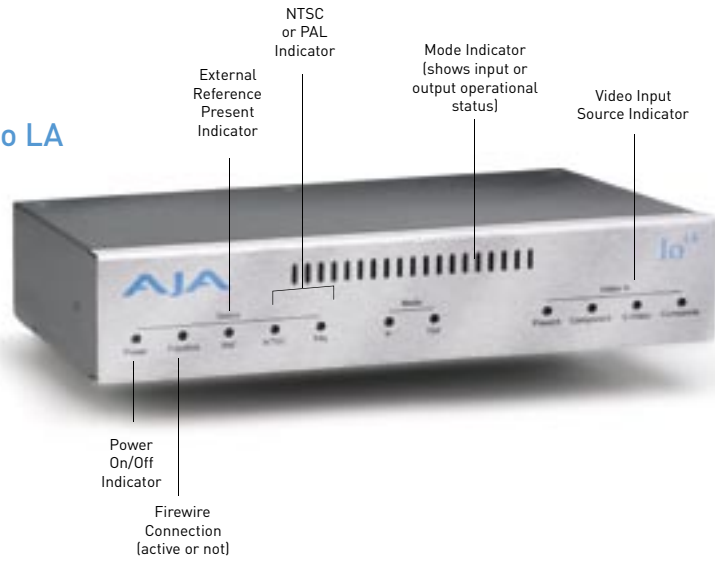
Digital:  
 24-bit AES/EBU, 48kHz sample rate  
 Synchronous or Non-synchronous (Internal sample rate conversion)  
 24-bit SMPTE-259 SDI embedded audio, 8 ch, 48kHz synchronous  
 ADAT, 8 channel optical, Synchronous or Non-synchronous, 24-bit 48kHz  
 SPDIF, 2 channel optical, Synchronous or Non-synchronous, 24-bit 48kHz  
 Analog:  
 Balanced/Unbalanced input  
 +24dbu Full Scale Digital  
 24-bit A/D, 48kHz sample rate  
 +/- 0.2db 20 to 20kHz Frequency Response

### AUDIO OUTPUT

Digital:  
 24-bit AES/EBU, 48kHz sample rate  
 24-bit SMPTE-259 SDI embedded audio, 8 ch, 48 KHz synchronous  
 ADAT, 8 channel optical, 24-bit 48kHz



Io LA



SPDIF, 2 channel optical, 24-bit 48kHz  
 Analog:  
 Balanced output (XLR and 25 pin D)  
 +24dbu Full Scale Digital (0dbFS)  
 24-bit D/A, 48kHz sample rate  
 +/- 0.2db 20 to 20kHz Frequency Response

Reference Input  
 Analog Color Black  
 Non terminating, Looping, 75 ohm

AudioWord Clock  
 Audio word clock, 48kHz, 3V TTL, 75 ohm

Machine Control  
 RS-422, Sony 9 pin protocol

FireWire  
 IEEE-1394a, 400Mb/s, 6 pin

Physical  
 Width: 17.25" (43.8 cm)  
 Depth: 11" (28 cm)  
 Height: 2RU, 3.5" (8.9cm")  
 Weight: 11 Lbs (5 kg)  
 Power Voltage: 100-240VAC,  
 Power Consumption: 18 watts (20 Watts maximum)

Regulatory  
 UL, FCC Class A, CE

## Io LA & Io LD SPECIFICATIONS

### VIDEO INPUT

Io LD: 8 or 10-bit SDI, SMPTE-259  
 Io LA Analog:  
 Composite/S-Video: NTSC, NTSCJ, PAL  
 10-bit A/D, 2x oversampling  
 3 line adaptive comb filter decoding  
 +/- .25 db to 5.0 MHz Y Frequency Response  
 +/- .25 db to 1 MHz C Frequency Response  
 .5% 2T pulse response  
 <- 1.5% Diff Phase  
 <- 1.5% Diff Gain  
 Component: SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB  
 10-bit A/D, 2x oversampling  
 +/- .25 db to 5.5 MHz Y Frequency Response  
 +/- .25 db to 2.5 MHz C Frequency Response  
 .5% 2T pulse response  
 <- 2 ns Y/C delay inequity

### VIDEO OUTPUT

Io LD:  
 8 or 10-bit SDI, SMPTE-259  
 Io LD, Io LA: (breakout cable on IoLD)  
 Composite/S Video: NTSC, NTSCJ, PAL  
 12-bit D/A, 8x oversampling  
 +/- .2 db to 5 MHz Y Frequency Response  
 +/- .2 db to 1 MHz C Frequency Response  
 .5% 2T pulse response

<- 1% Diff Phase  
 <- 1% Diff Gain  
 Component: SMPTE/EBU N10,  
 Betacam 525 line, Betacam 525J, RGB  
 12-bit D/A, 8x oversampling  
 +/- .2 db to 5.5 MHz Y Frequency Response  
 +/- .2 db to 2.5 MHz C Frequency Response  
 .5% 2T pulse response  
 <- 1 ns Y/C delay inequity

### AUDIO INPUT

Io LD:  
 24-bit SMPTE-259 SDI embedded audio, 8 ch,  
 48kHz synchronous  
 Io LA:  
 4 Ch Balanced input (XLR breakout cable)  
 +24dbu Full Scale Digital  
 24-bit A/D, 48kHz sample rate  
 +/- 0.2db 20 to 20kHz Frequency Response

### AUDIO OUTPUT

Io LD:  
 24-bit SMPTE-259 SDI embedded audio, 8 ch, 48kHz  
 synchronous  
 SPDIF, 2-channel, RCA connector, 24-bit 48kHz  
 2 Ch Balanced output (XLR breakout cable)

Io LA:  
 4 Ch Balanced output (XLR breakout cable)  
 +24dbu Full Scale Digital  
 24-bit D/A, 48kHz sample rate  
 +/- 0.2db 20 to 20kHz Frequency Response

Reference Input  
 Analog Color Black  
 Non terminating, Looping, 75 ohm

Machine Control  
 RS-422, Sony 9 pin protocol

FireWire  
 IEEE-1394a, 400Mb/s, 6 pin

Physical (applies to Io LA or Io LD)  
 Width: 8.5" (21.59 cm)  
 Depth: 10.75" (27.30 cm)  
 Height: 1RU, 1.75" (4.445 cm)  
 Weight: 4 Lbs (1.814 kg)

Power Voltage: 100-240VAC,  
 Power Consumption: Io LA 10 Watts, Io LD 8 Watts

Regulatory  
 UL, FCC Class A, CE

### Incredible 3-Year Warranty

AJA Video warrants that XENA products will be free from defects in materials and workmanship for a period of three years from the date of purchase.

AS PASSIONATE AS YOU ARE



AJA VIDEO SYSTEMS INC.  
P.O. Box 1033 • Grass Valley, California 95945  
800.251.4224 • 530.274.2048 • [www.aja.com](http://www.aja.com)