Because it matters.

10-bit HD over FireWire.
10-bit HD over FireWire.

Recording 10-bit Apple ProRes 422 direct to your Mac via a single FireWire 800 connection, AJA’s award-winning Io HD is a portable plug-in solution for working with HD and SD.

Facilitating high-quality capture and playback with the widest range of gear, Io HD lets you record Apple ProRes files to a FireWire-equipped Mac.

Easily interfaced with your on set capture or post production equipment, Io HD features hugely flexible professional video and audio connections, allowing it to enhance any workflow. The compact rear panel offers SD/HD analog I/O, SD/HD digital I/O including HD-SDI and HDMI, balanced analog and digital AES audio, as well as RS-422, Genlock, and even LTC timecode connections.

Integrating with the software running on your computer and utilizing efficient hardware-based encoding and decoding, Io HD handles the heavy lifting of compressing and decompressing ProRes files, keeping the load off your CPU and providing superior quality encoding/decoding compared to software-only solutions.

Io HD also includes AJA’s powerful hardware-based 10-bit up/down/cross conversions, enabling real time, high quality images for both capture and playback.

Built to the exacting standards of all AJA hardware, Io HD is backed by our world-class support network, 3-year international warranty and advanced exchange service.

For full product specifications visit www.aja.com/io-hd/techspecs
Features

ProRes encoding and decoding

With Io HD, video professionals can avoid lossy tape compression and capture footage to high quality 10-bit, full raster Apple ProRes 422 files - ready for use immediately in your editing software. ProRes can create images that are virtually indistinguishable from the source, while the 10-bit sample depth means the results are easily suitable for color-correction and compositing.

Because the files are compressed or expanded directly within the Io HD, the actual data that has to travel to or from the computer is much smaller than if uncompressed HD video were being transferred. This allows Io HD to utilize a standard FireWire 800 connection.

Huge I/O flexibility

Io HD’s comprehensive connectivity allows it to interface with the widest range of post-production and on-set capture/playback equipment, from HD VTRs and cameras through to analog legacy devices. The rear panel features two SD/HD inputs and two outputs, one connection for Genlock input and a loop-through, and two groups of three BNCs which may be configured for component SD/HD analog video input and output. HDMI input and output allows interfacing with low-cost camcorders and HD monitors. Add to the list S-Video, composite video, LTC in and out—and a 9-pin connector for RS-422 machine control and you can connect to just about anything.

Audio support includes 8-channel 24-bit AES via BNC, 8-channel embedded audio on SDI/HDMI I/O, and analog connections via XLR and RCA.

Integrated AJA hardware conversion

Using AJA’s powerful conversion technology, Io HD allows you to ingest any resolution and convert to a common, working format. This brings greater efficiencies to your post production workflow as individual shots no longer have to be rescaled within the editing or graphics application.

Io HD features full 10-bit, broadcast-quality, motion-adaptive SD to HD up conversion, HD to HD cross conversion, HD to SD down conversion, and HD/SD 12-bit component analog output. That’s the equivalent of fitting the functionality of several AJA converters into one convenient, cost-effective box.

Io HD conversion capabilities streamline the creation of dailies and deliverables at broadcast quality - in real time.
Case study

Independent Sci-Fi Feature Uses HD Video I/O Device to Facilitate Screening Room Projection

From capture to conversion, Keith Collea’s entire post production workflow relies on AJA at its core. With a résumé including work on blockbusters such as 'Alien: Resurrection', 'Independence Day' and 'Pearl Harbor', the effects and post production veteran has been a longtime user of AJA products. Collea’s entire post production workflow depends on AJA products, including KONA, Io HD, and Converters.

“I’m a huge AJA fan,” says Collea.

On his recent feature, ‘The Gene Generation’, Keith chose Io HD as the centerpiece of a fully portable projection system, used to facilitate both test and cast and crew screenings of the sci-fi indie feature.

The effects-heavy feature, based on the “DNA Hacker Chronicles” graphic novel series, presents a futuristic world populated with deadly DNA Hackers and the Assassins who hunt them. Keith Collea, co-writer and producer for “The Gene Generation,” also served as Technical Supervisor for the project. He used AJA’s Io HD as an integral part of a fully portable movie projection system that allowed the film to be projected on a Sony 4K digital cinema projector at the American Film Institute’s Mark Goodson Theater without the use of tape-based VTR for playback.

“Our goal was to create an ‘over-the-shoulder’ projection system, one that fit entirely into a shoulder bag I could carry on my motorcycle and that would allow us to just walk in, plug in a cable, and walk out again—no tapes to back up, no heavy equipment to schlep, no truck to rent,” relates Collea. “Using the Io HD, an Apple Intel MacBook Pro and a G-Tech G-DRIVE, we were able to do just that and nobody could see the difference. It saved us time and money, and the picture quality was better than if it came off of tape. It was just incredible.”

“AJA products are rock-solid dependable and the customer service is beyond stellar - there’s never been a time when I couldn’t get someone on the phone to help with any issue I might have, even with non-AJA related problems.”
Workflow integration

Enhanced workflows...

Software compatibility

Io HD is supported by many editing and graphics applications as well as AJA’s free applications, which can turn a standard computer into a key part of your workflow by allowing you perform ingest and output without tying up a valuable editing station.

Using AJA VTR Xchange and the AJA Io HD

The combination of AJA VTR Xchange and Io HD are perfect for bypassing tape compression and capturing to the high quality 10-bit, full raster Apple ProRes 422 family of codecs. This workflow can include ingest from HDV cameras with HDMI output, to ingest from broadcast and digital cinema cameras with component or SDI outputs. The AJA Io HD also provides an LTC input and support for embedded timecode in the HD-SDI video (RP-188) so you can obtain timecode in your captured footage that matches the source timecode from the camera.

Workflow

- Make appropriate audio, video and timecode connections to the AJA Io HD.
- Make appropriate settings in the AJA VTR Xchange application for audio, video and timecode.
- Capture to Apple ProRes 422, Apple ProRes 422 (HQ), Apple ProRes (LT) and Apple ProRes (Proxy)
- Import captured media into Final Cut Pro.

...in post or on set

Use Io HD within your post production suite to connect all of your professional devices.

Use Io HD on set to capture from cameras with analog, SDI or HDMI outputs and simultaneously monitor from any of Io HD’s outputs in HD or SD.
Connections

- LTC Timecode I/O
- SDI I/O (SD and HD)
- Component I/O (SD and HD)
- S-video I/O
- Composite I/O
- Reference Video I/O
- AES/EBU 8-channel unbalanced audio I/O
- RS-422 Machine Control
- Connects to Mac via a single FireWire 800 cable
- Analog 2-channel unbalanced audio output (RCA)
- Analog 4-channel balanced audio I/O (XLR)
Incredible 3-year warranty
AJA Video warrants that Io products will be free from defects in materials and workmanship for a period of three years from the date of purchase.

About AJA Video Systems, Inc.
Since 1993, AJA Video has been a leading manufacturer of video interface and conversion solutions, bringing high-quality, cost-effective digital video products to the professional broadcast and post-production markets. AJA offers the Io and KONA desktop video products, Ki Pro family of recorders, miniature standalone converters, and a complete line of rack mount interface and conversion cards and frames.

With a headquarters and design center located in Grass Valley, California, AJA Video offers its products through an extensive sales channel of dealers and systems integrators around the world. For further information, please see our website at www.aja.com