Ki Pro

Connector Side

FireWire 400
1394a
To Camera
(for Control & Timecode)

Ethernet
10/100/1000
RJ45

AJA
Lens Tap

LANC
Loop

FireWire 800
1394b
Connection
to Mac

LTC
In/Out

Balanced
Audio In

Unbalanced
Audio In

Left   Right

WiFi Radio
ON/OFF
LED
Indicator

HDMI
In/Out

SDI
In/Out

Component
In/Out

Composite
Out

Line Level
Switch

Left   Right

Balanced
Audio Out

Unbalanced
Audio Out

Rear

Industry Standard
4-pin XLR
For Power
(use Battery Power
or supplied AC Adapter)

Operator Side

140 x 16 pixel
Alphanumeric
and Graphics Display

Storage Module
Release
Button

Storage Module
(slides into slot)

Expresscard 34 Slots (2)
x1 lane PCIe

VU
Meters
2-CH

Audio
Input
Level
Adjust

Transport and Menu Buttons

Head
Phone
Volume

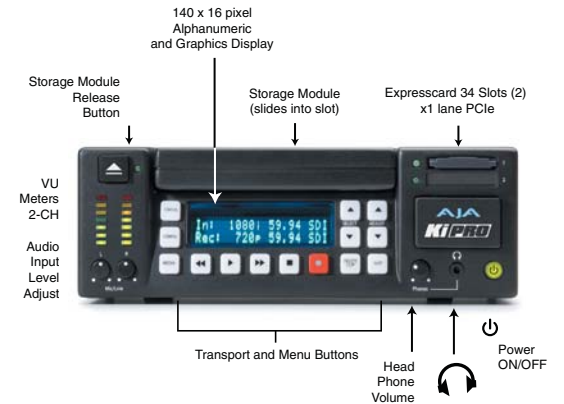Power
ON/OFF

Unify Cameras and Formats… Simplify Production & Post

Prosumer

Connect prosumer HDV and AVCHD camcorders via HDMI to Ki Pro. Ki Pro enables cost-effective cameras to produce professional quality recordings in Apple ProRes 422 and Apple ProRes 422 (HQ).

Professional

Connect Ki Pro to a wide variety of professional HD cameras via component or HD-SDI. The Apple ProRes 422 recordings that Ki Pro produces rival the native recordings of many HD cameras. Apple ProRes 422 recordings are full raster video at 10-bit quality whereas typical camera recordings produce a variety of compressions, horizontal resolutions, file types, and are often only at 8-bit.

Broadcast

Use Ki Pro's hardware-based conversion capabilities to unify the different formats employed by broadcast quality cameras (1080 or 720) so that all of your cameras can record in the same format and frame rate. You can even extend the life of your professional SD cameras with Ki Pro's upconversion capability.

Ki PRO

Post-production redefined...during production.

Everyone from broadcasters to indie filmmakers can probably agree on one thing: the possible choices for image acquisition are daunting. Different cameras, different formats, different recording media and different compression schemes. Wouldn't it be nice if there was a way to simplify acquisition so that virtually any camera, digital or analog, could record the same format and resolution? Enter the AJA Ki Pro.

The AJA Ki Pro is a tapeless video recording device that records high-quality Apple ProRes 422 QuickTime files onto computer-friendly media. Because it features SD/HD-SDI, HDMI, and analog inputs, you can interface with virtually any type of camera you might own or rent. Enjoy monitoring flexibility through Ki Pro's numerous simultaneous outputs, connecting to both professional and consumer monitors.

Ki Pro is portable and rugged; designed for real production environments. With the optional exo-skeleton it can sit below your camera—out of the way of your battery adapters, wireless mics and other accessories. Integration with your other production gear is seamless.

Ki Pro is intuitive to operate. Alongside the camera, the familiar VTR-like buttons provide immediate controls for basic operation. From a distance, use a web browser via ethernet or WiFi to control operations from a laptop or iPhone.

A revolution in production and post

Eliminate the cost and inconvenience of logging and capturing footage. Ki Pro produces Apple ProRes 422 QuickTime files that are ready for immediate use within Final Cut Studio. Simply connect the media to a host computer and begin editing. Unify SD, 720 and 1080 cameras and formats with one superior 10-bit full-raster codec—Apple ProRes 422. Ki Pro features cross-conversion so you can have a 720p camera produce a 1080i recording to match your other camera... or vice versa. And if you've got high-quality SD cameras, Ki Pro can even help you extend their use since it also up-converts SD camera signals to HD recordings.

- **No more digitizing**
- **No more worrying about which camera to use**
- **High-quality ready-to-edit video**

Ki Pro in the field

Ki Pro is portable and rugged; designed for a variety of production environments. Powered through an industry standard 4-pin XLR, you have flexible AC and battery options. An optional exo-skeleton can be used with your camera and tripod—complete with sliding baseplate and slots for 15mm rods.

Ki Pro connects

Capture the full quality of your camera by tapping the direct uncompressed camera outputs. Connect any digital camera or VTR via component analog, SDI or HDMI to Ki Pro. Balanced and unbalanced audio connectors, LTC input/output, and even LANC, are provided. By bypassing tape or recordable media compression, Ki pro maintains the best possible image quality your camera produces.

Ki Pro and Final Cut Studio

From acquisition to delivery, use the codec at the core of Apple's Final Cut Studio suite of applications. Ki Pro supports an Apple file-based workflow by recording standard Apple ProRes 422 QuickTime files on industry standard media. Record to removable 34mm ExpressCards, or a removable HDD Storage Module containing a hard disk drive (standard) or an optional SSD Storage Module with a solid state disk. When removed, the Storage Module functions as a standard bus-powered FireWire 800 drive. If bus power is not avaialble, the Storage Module has a standard DC power connector for a user-supplied AC power adapter.

Features

- Simultaneously record to host camera and Ki Pro
- Bridge proprietary compression schemes by recording to Apple ProRes 422
- Bridge media complexity by recording to portable file-based storage
- Bridge format chaos via hardware up/down/cross-conversion
- Extend client review capabilities
- Bridge production and post-production, effectively eliminating log and capture
- Extend productive life of existing cameras
- Embrace future workflows with powerful conversion capabilities

Acquire

Ki Pro is post-ready production.

Media

Remove the Storage Module or ExpressCard 34 media from Ki Pro.

Edit

Connect this media to either your Apple MacBook Pro or Apple Mac Pro. Import the footage into Final Cut Pro. Edit. *Simple.*

Specifications

Video Input

Digital:
 SD and HD-SDI (1xBNC), SMPTE-259/292/296
 HDMI

Analog:
 SD/HD Component (3xBNCS):
  SMPTE/EBU N10, Betacam 525 line,
  Betacam 525J, RGB, YPbPr
  12-bit A/D, 2x oversampling

Video Output (all simultaneously active)

Digital:
 SD and HD-SDI, SMPTE-259/292/296 (1xBNC)
 HDMI

Analog:
 Composite (1xBNC):
  NTSC, NTSCJ, PAL
  12-bit D/A, 8x oversampling
 SD/HD Component (3xBNCs):
  SD: SMPTE/EBU N10, Betacam 525 line,
  Betacam 525J, RGB
  12-bit D/A, 8x oversampling
  HD: YPbPr, RGB
  12-bit D/A, 2x oversampling

Audio Input

Digital:
 24-bit SDI embedded audio, 8 channel, 48kHz
 HDMI embedded, 2 channel

Analog:
 24-bit A/D, 2 channel balanced (2 XLR), 48kHz
 Input level: Line, Mic, Mic + phantom 48Vdc
 2 channel unbalanced (2 RCA)

Audio Output

Digital:
 24-bit SDI embedded audio, 8 channel, 48kHz
 HDMI embedded, 8 channel

Analog:
 24-bit D/A, 2 channel balanced XLR, 48kHz
 2 channel unbalanced (2 RCA)

Network
 10/100/1000 Ethernet (RJ45)
 802.11g WiFi
 Embedded webserver for remote control

Panel User Interface
 2 x 20 character display, with dedicated buttons

Timecode
 LTC timecode input and output via BNC

Control
 LANC Loop (2 LANC connectors)
 Lens Tap: connects to optional AJA Lens Tap intercept
  cable placed between camera body and lens for
  start/stop control
 IEEE-1394a/FireWire 400 for control and timecode data

Machine Control
 RS-422, 9-pin—for future use

FireWire
 IEEE-1394b, FireWire™ 800Mb/s connects to Mac Pro or
  MacBook Pro (mount as harddrive)

Hardware up-conversion - 10-bit
 Anamorphic: full-screen
 Pillar box 4:3: results in a 4:3 image in center
  of screen with black sidebars
 Zoom 14:9: results in a 4:3 image zoomed
  slightly to fill a 14:9 image with black side bars
 Zoom Letterbox: image zoomed to fill screen
 Zoom Wide: combination of zoom and horizontal
  stretch to fill 16:9 screen; this setting can introduce a
  small aspect ratio change

Hardware down-conversion - 10-bit
 Anamorphic: full-screen
 Letterbox: image is reduced with black top and bottom
  added to image area with the aspect ratio preserved
 Crop: image is cropped to fit new screen size

Hardware cross-conversion - 10-bit
 1080i to 720P
 720P to 1080i
 720P to 1080PsF

SD to SD aspect ratio conversion
 Letterbox: transforms SD anamorphic to a letterboxed
  image.
 H Crop: produces a horiztonally stretched effect on the
  image; transforms anamorphic SD to full frame.
 SD Pillarbox: produces image in screen center with
  black borders on left and right sides and an
  anamorphized image in the center.
 V Crop; transforms SD letterbox material to an
  anamorphic image.

Product includes:
• Ki Pro Recorder
• Ki Pro HDD Storage Module
• AC Adapter 110/220 with 4-pin XLR connector

Product options

Exo-skeleton – provides a surrounding chassis for the Ki Pro that can both mount to a tripod and provide a mount for camera on top; this combination allows convenient access to controls.

Ki Pro SSD Storage Module – although the Ki Pro comes standard with a removable HDD Storage Module, an optional SDD Storage Module is also available. The Ki Pro Solid State Storage Module (SSD) is recommended for mobile environments where shock-proof sturdiness may be needed. The Ki Pro SSD Storage Module offers the ultimate in media reliability.

Ki Pro Hard Drive Storage Module – although Ki Pro comes with one removable HDD Storage Module standard, you can buy extras and simply swap them as needed.

Ki Pro Rod Accessory Kit – this kit adds endplates to the Exo-skeleton so you can attach two user-supplied 15mm camera accessory rods. The endplates have knobs for adjusting the height of the rod brackets relative to the camera, as well as a set of knobs for securing the rods in the brackets.

AJA Lens Tap Cable Accessory – this AJA proprietary cable allows Ki Pro to connect between the lens tap control connector on a lens and camera body, thereby intercepting the lens control signals for use in simple start/stop Ki Pro recording operations.

Exo-skeleton

Storage Module
(HDD or SSD)

Rod Accessory kit

Rod Accessory kit installed on
Exo-skeleton

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

ProRes

B e c a u s e   i t   m a t t e r s .

AJA
VIDEO SYSTEMS ®

AJA Video Systems Inc.
Grass Valley, California 95945
www.aja.com • sales@aja.com • support@aja.com